US008156105B2

(12) **United States Patent**
Altounian et al.

(10) **Patent No.: US 8,156,105 B2**
(45) **Date of Patent: Apr. 10, 2012**

(54) **RAPID ITEM DATA ENTRY FOR PHYSICAL ITEMS IN THE CONTROL OF A USER IN AN ITEM DATA MANAGEMENT SERVER**

(75) Inventors: **David Altounian**, Austin, TX (US); **Charles Zeller**, Austin, TX (US); **Sara Fox**, Austin, TX (US)

(73) Assignee: **ITAGGIT, Inc.**, Austin, TX (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1337 days.

(21) Appl. No.: **11/500,199**

(22) Filed: **Aug. 7, 2006**

(65) **Prior Publication Data**

US 2007/0198488 A1 Aug. 23, 2007

Related U.S. Application Data

(63) Continuation-in-part of application No. 11/486,709, filed on Jul. 14, 2006.

(60) Provisional application No. 60/771,135, filed on Feb. 6, 2006, provisional application No. 60/743,733, filed on Mar. 24, 2006, provisional application No. 60/743,735, filed on Mar. 24, 2006, provisional application No. 60/743,734, filed on Mar. 24, 2006, provisional application No. 60/743,737, filed on Mar. 24, 2006, provisional application No. 60/743,736, filed on Mar. 24, 2006.

(51) **Int. Cl.**
G06F 7/00 (2006.01)

(52) **U.S. Cl.** **707/711**; 707/741; 715/230

(58) **Field of Classification Search** 707/795, 707/802, 803, 999.1, 999.101, 999.102, 711, 707/741
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2006/0161635 A1* 7/2006 Lamkin et al. 709/217
2007/0056002 A1* 3/2007 Ganesan et al. 725/95

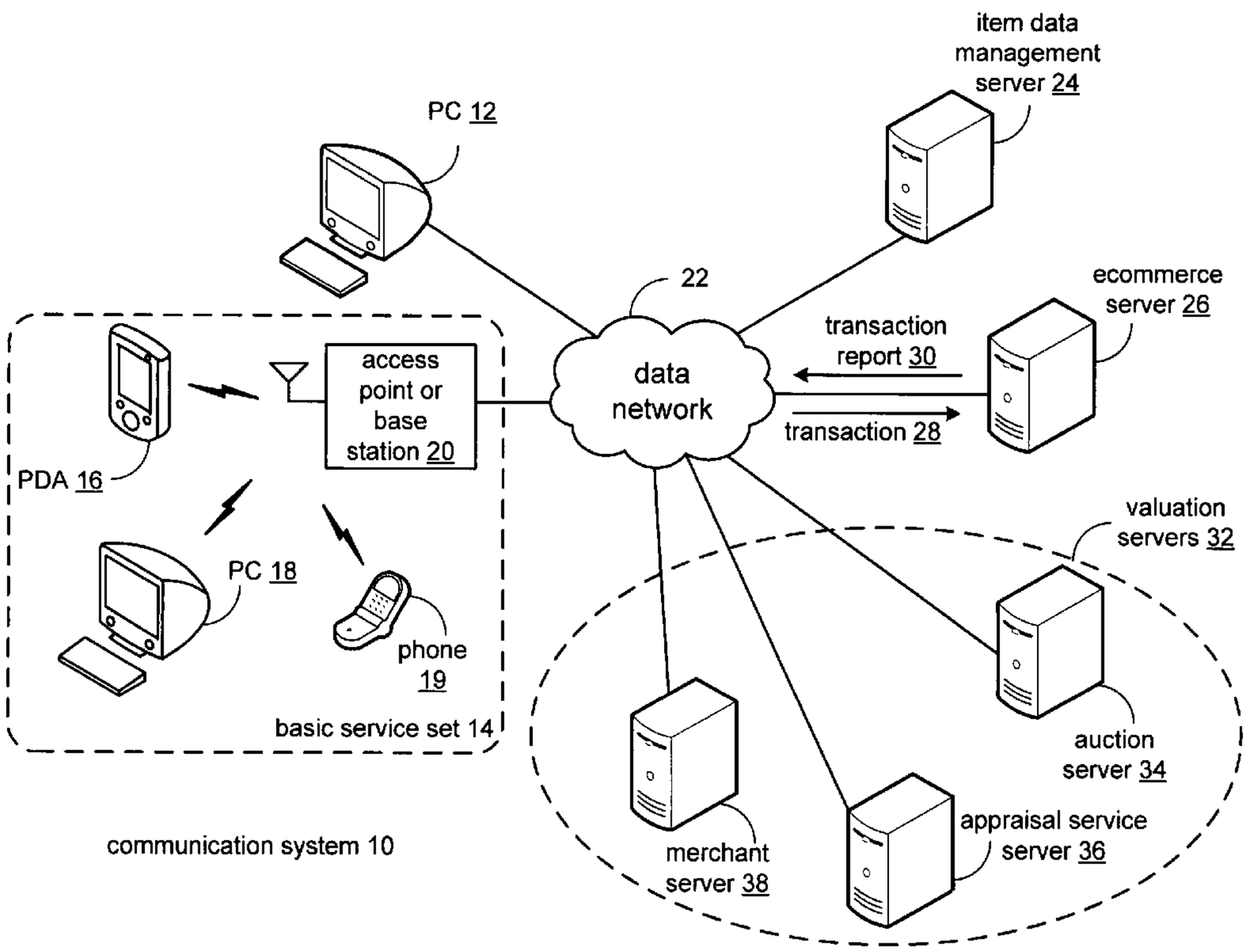
* cited by examiner

Primary Examiner — Amy Ng
(74) *Attorney, Agent, or Firm* — Garlick & Markison; Kevin L. Smith

(57) **ABSTRACT**

An item data management server with rapid item data entry to facilitate database population with physical item data records for physical items in the control of a user. The rapid item data entry includes receiving a media file with at least an image and/or a verbal description for a physical item in which the item data management server may create physical item data record.

18 Claims, 29 Drawing Sheets



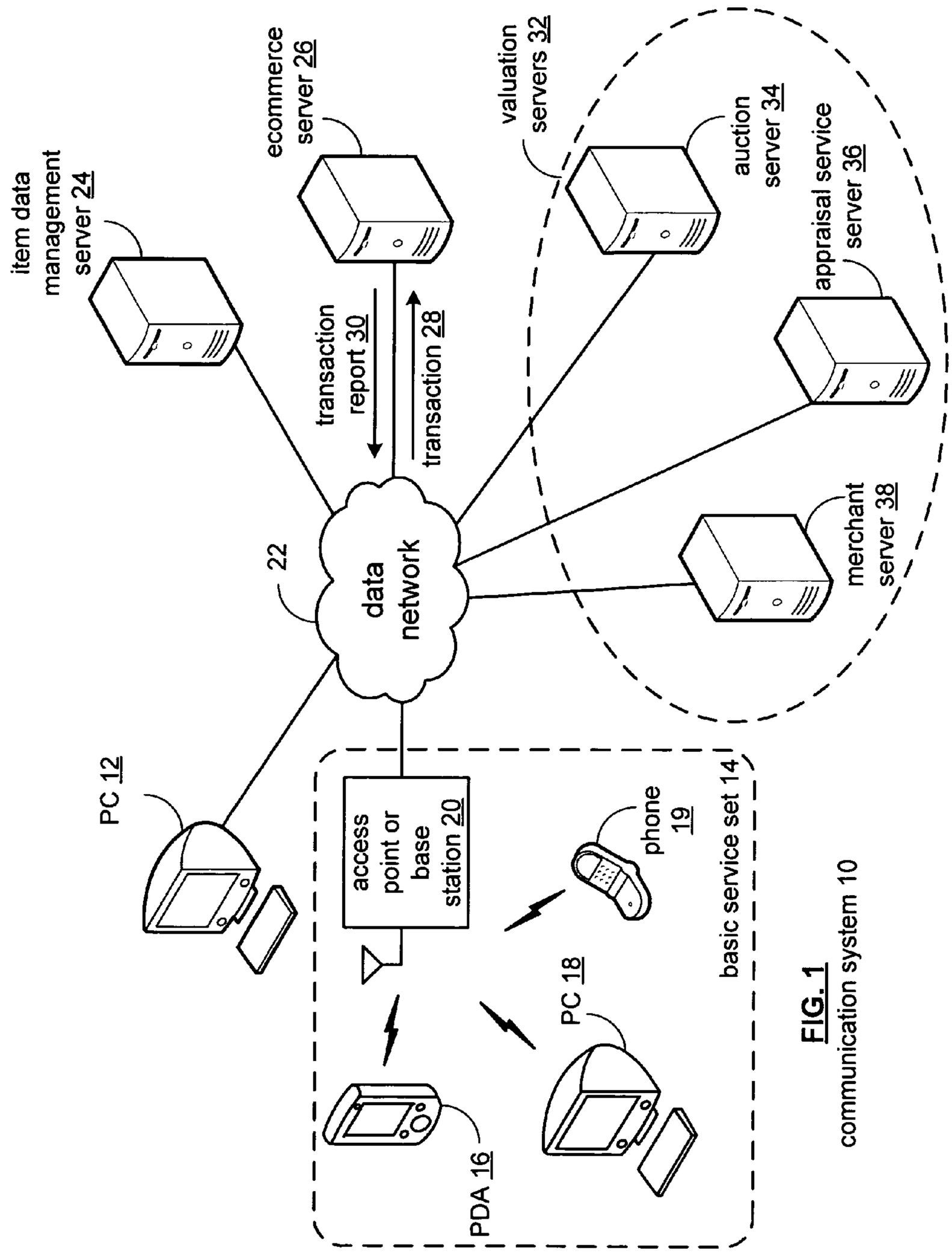
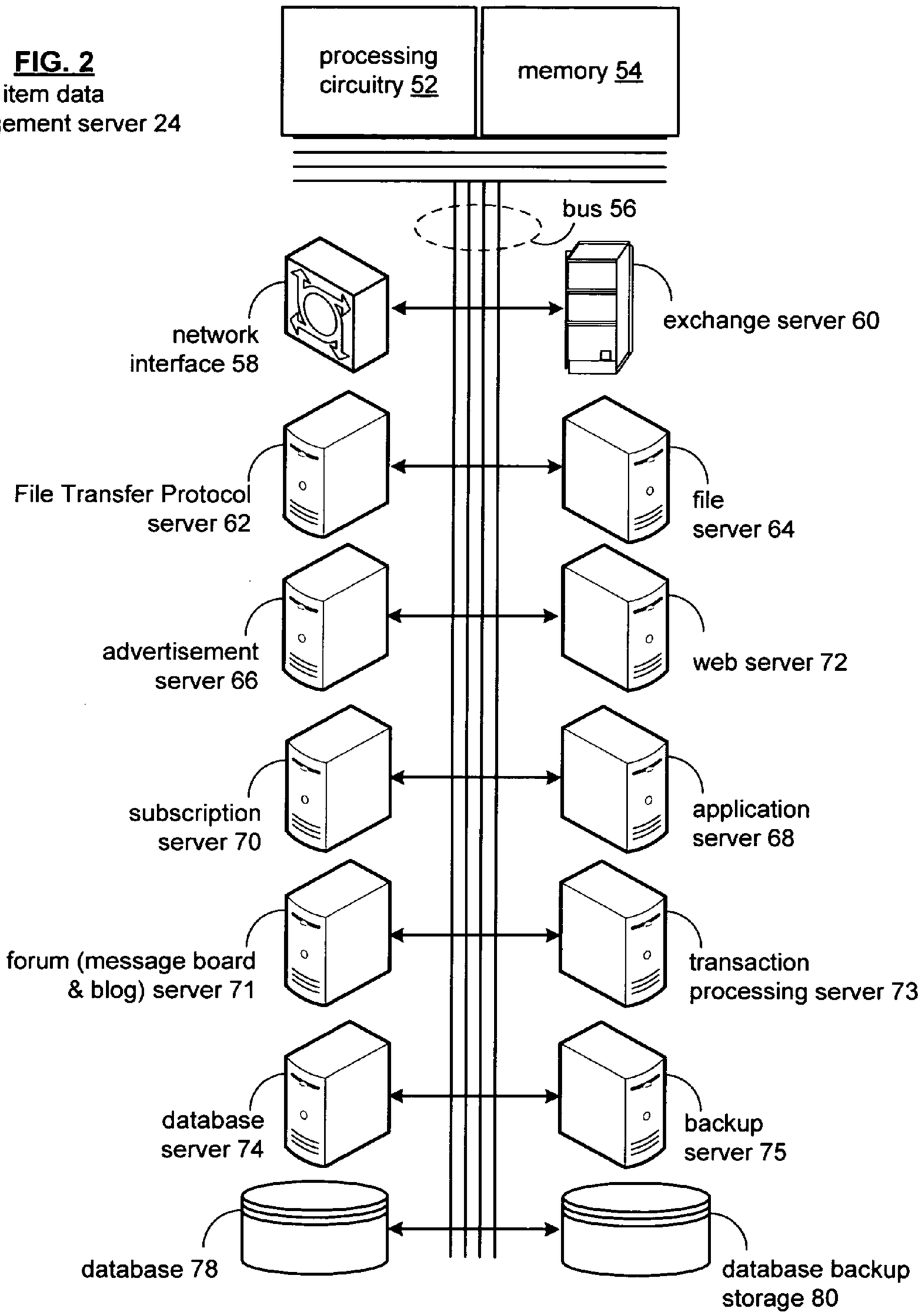


FIG. 1
communication system 10

FIG. 2
item data
management server 24



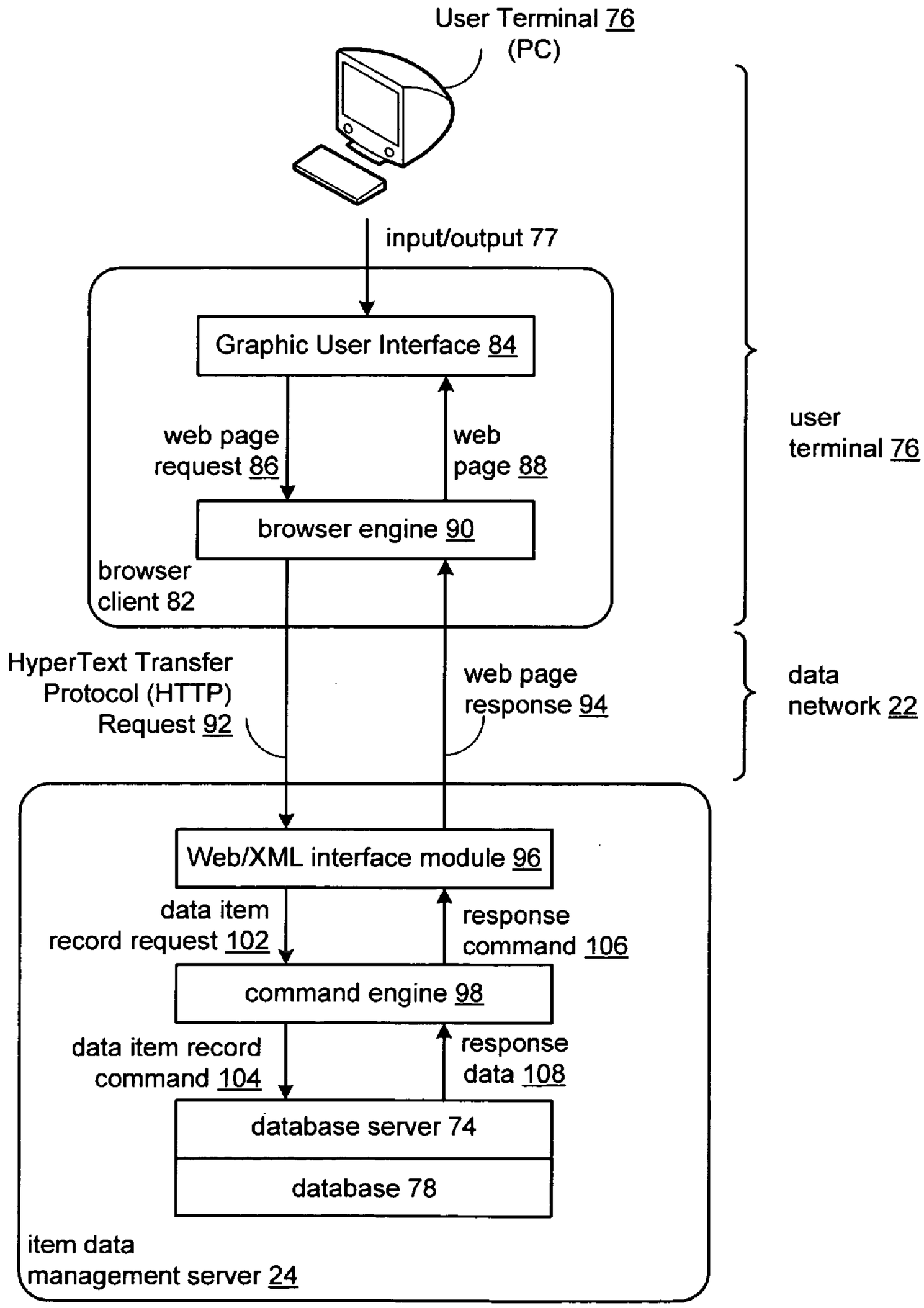

User Terminal 76
(PC)
input/output 77
Graphic User Interface 84
web page request 86
web page 88
browser engine 90
browser client 82
user terminal 76
HyperText Transfer Protocol (HTTP) Request 92
web page response 94
data network 22
Web/XML interface module 96
data item record request 102
response command 106
command engine 98
data item record command 104
response data 108
database server 74
database 78
item data management server 24

FIG. 3

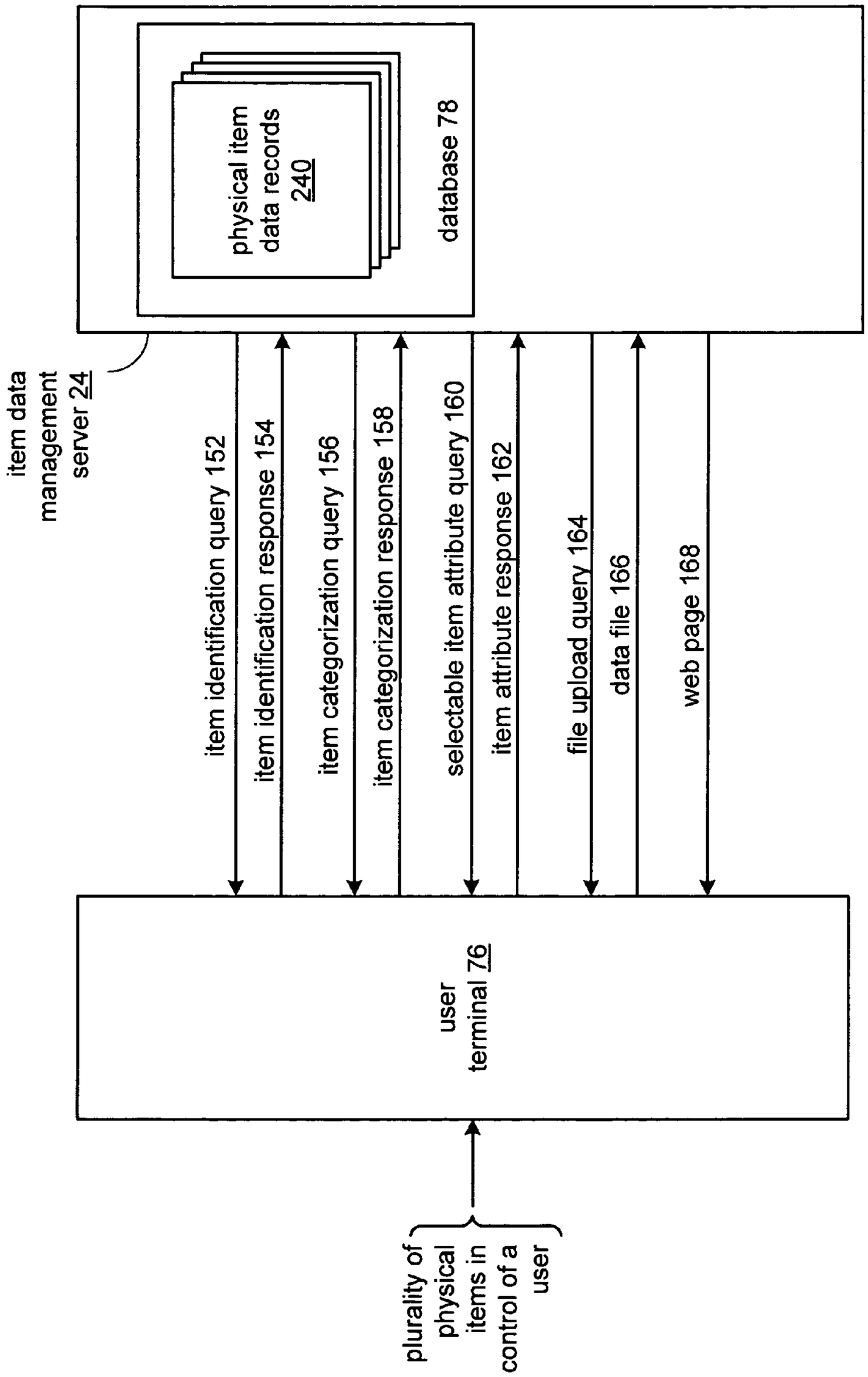

database 78
physical item data records 240
item data management server 24
item identification query 152
item identification response 154
item categorization query 156
item categorization response 158
selectable item attribute query 160
item attribute response 162
file upload query 164
data file 166
web page 168
user terminal 76
plurality of physical items in control of a user

FIG. 4

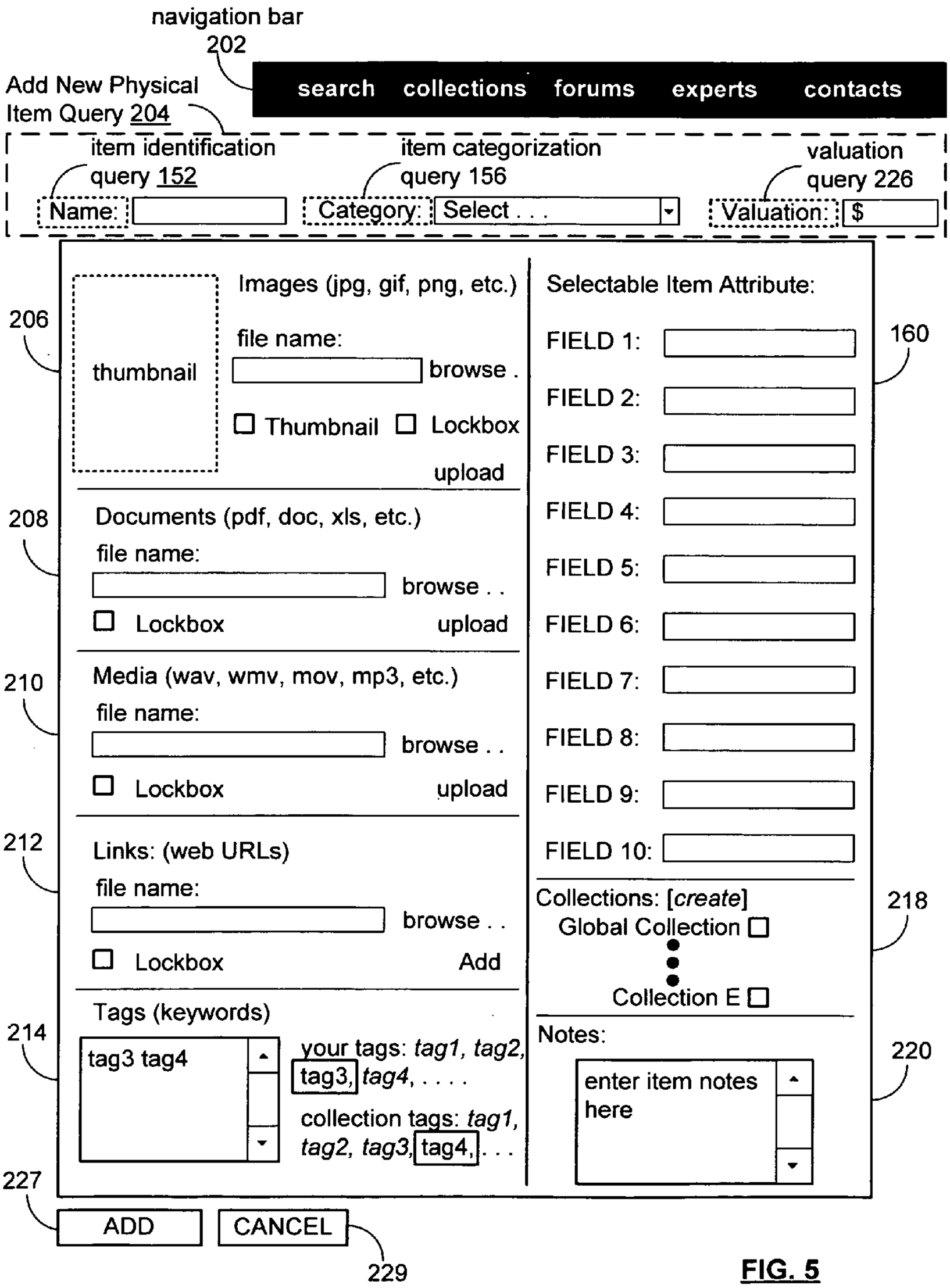


FIG. 5
add physical item GUI 200

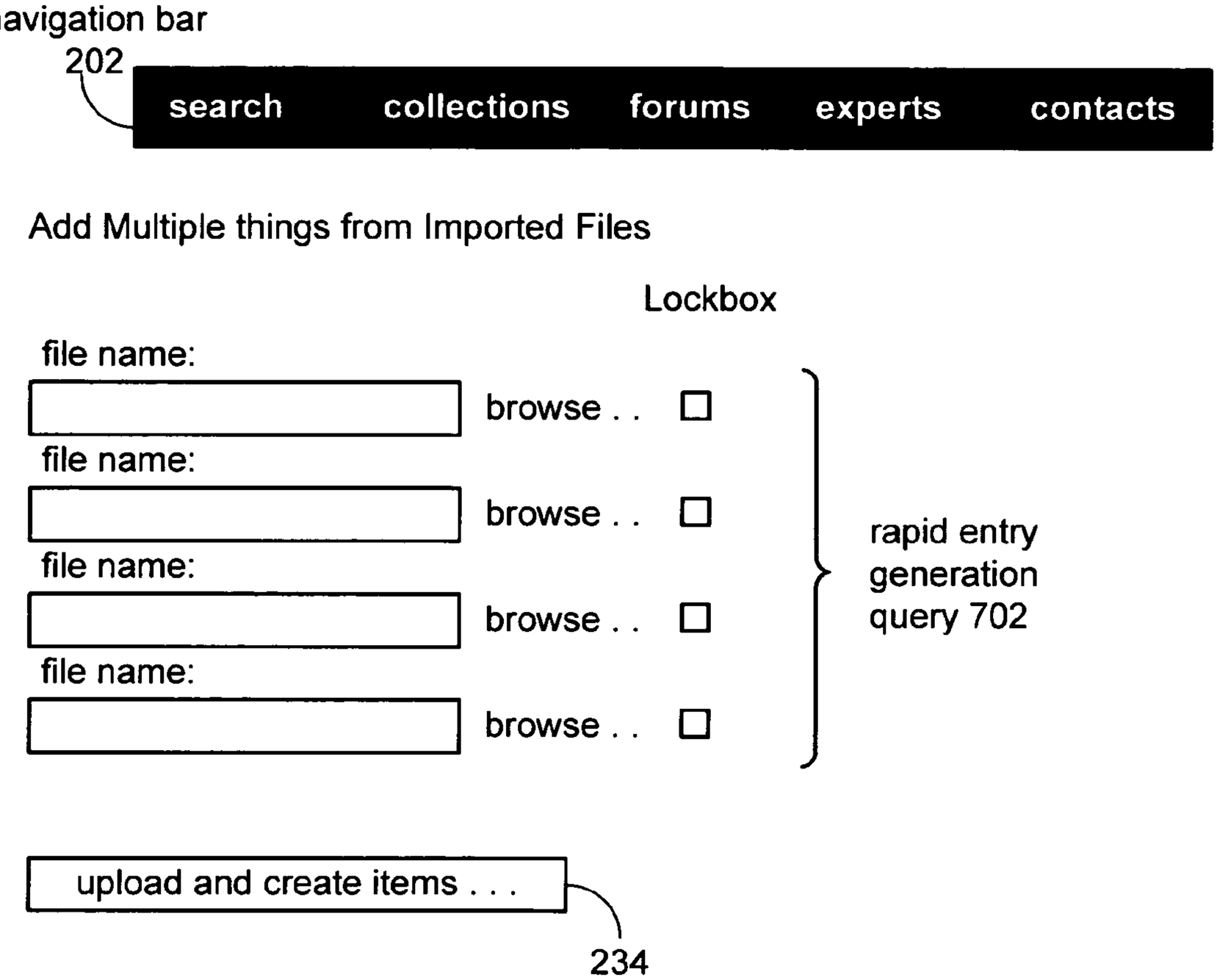


FIG. 6

rapid item import GUI 230

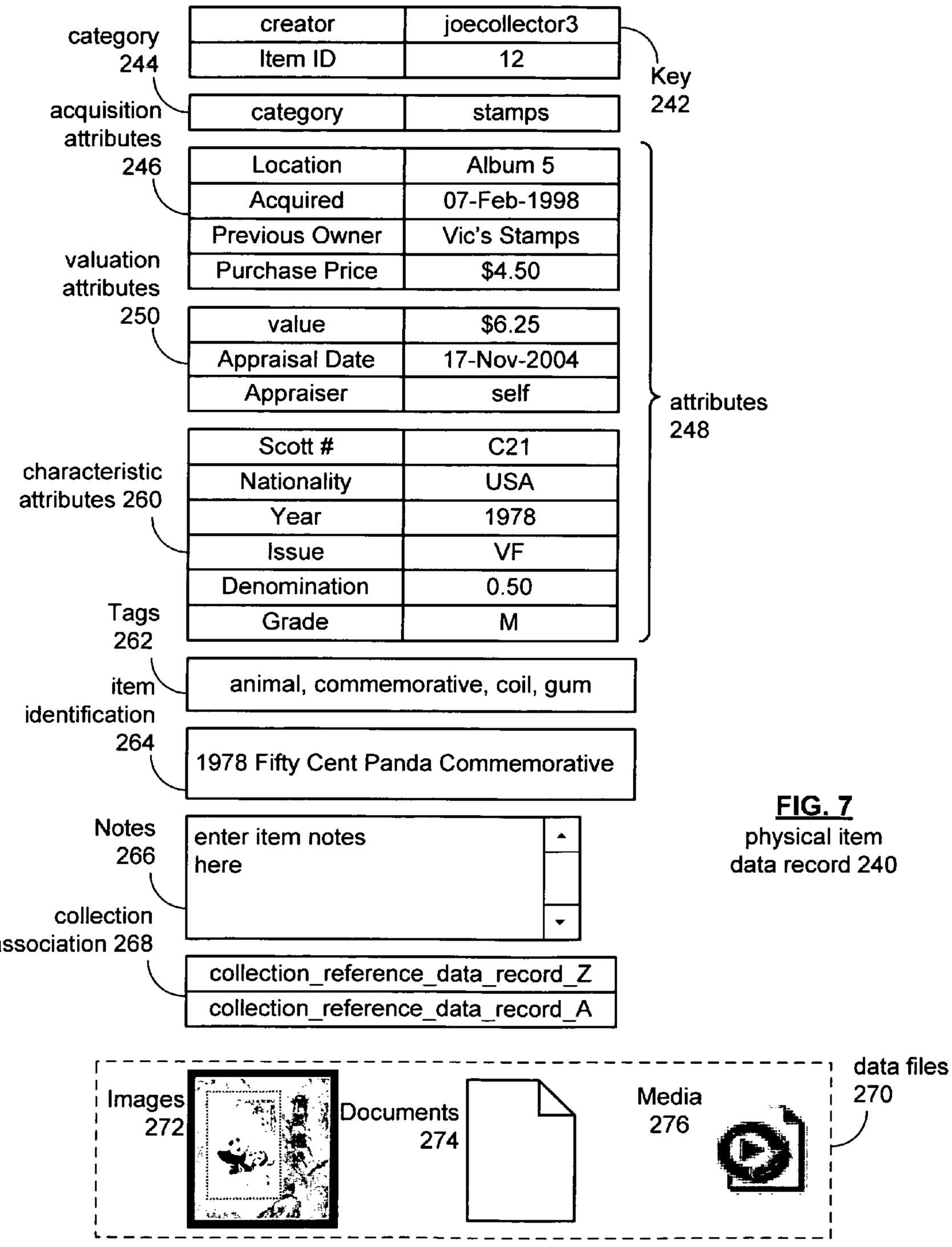


FIG. 7
physical item
data record 240

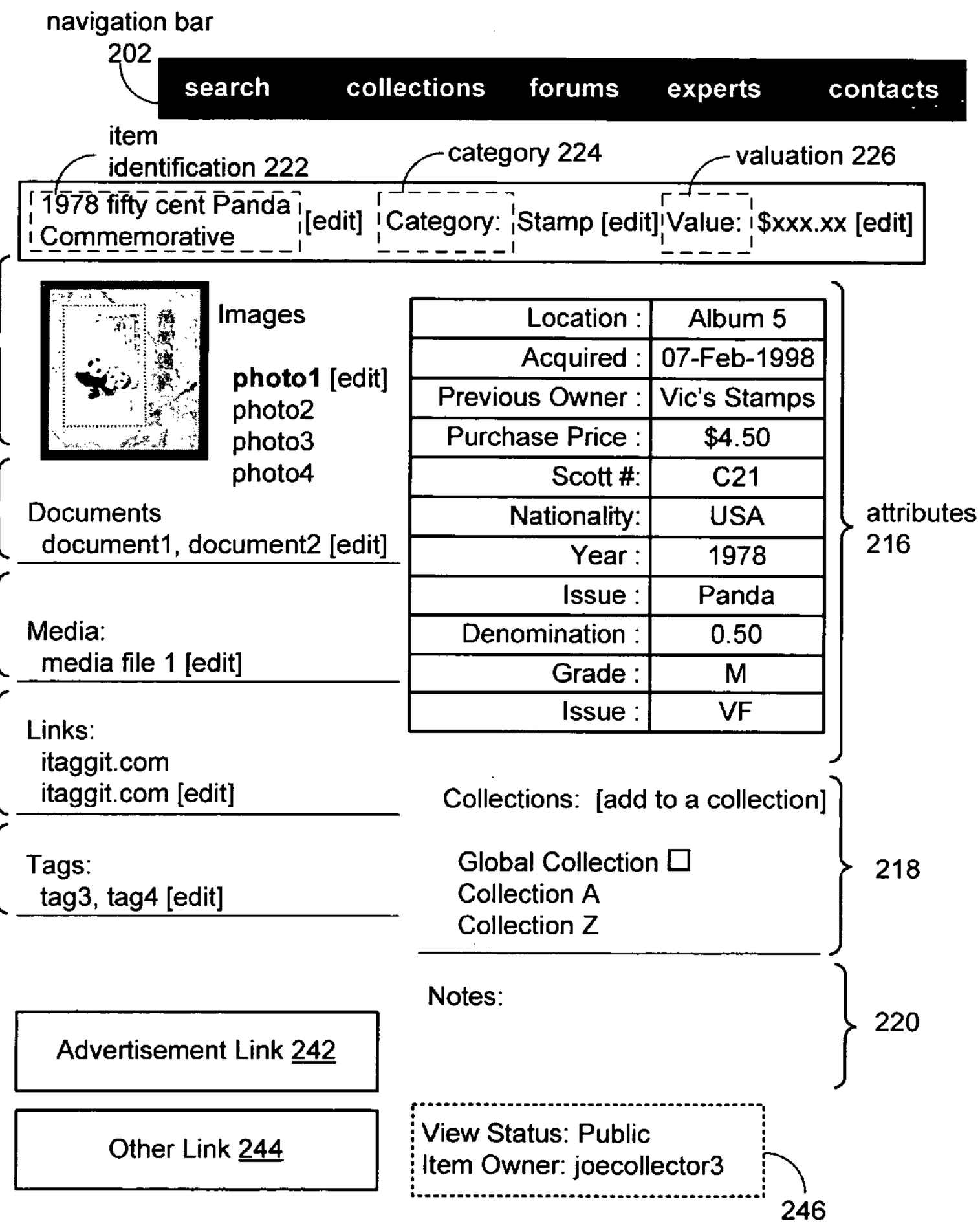


FIG. 8
web page 168

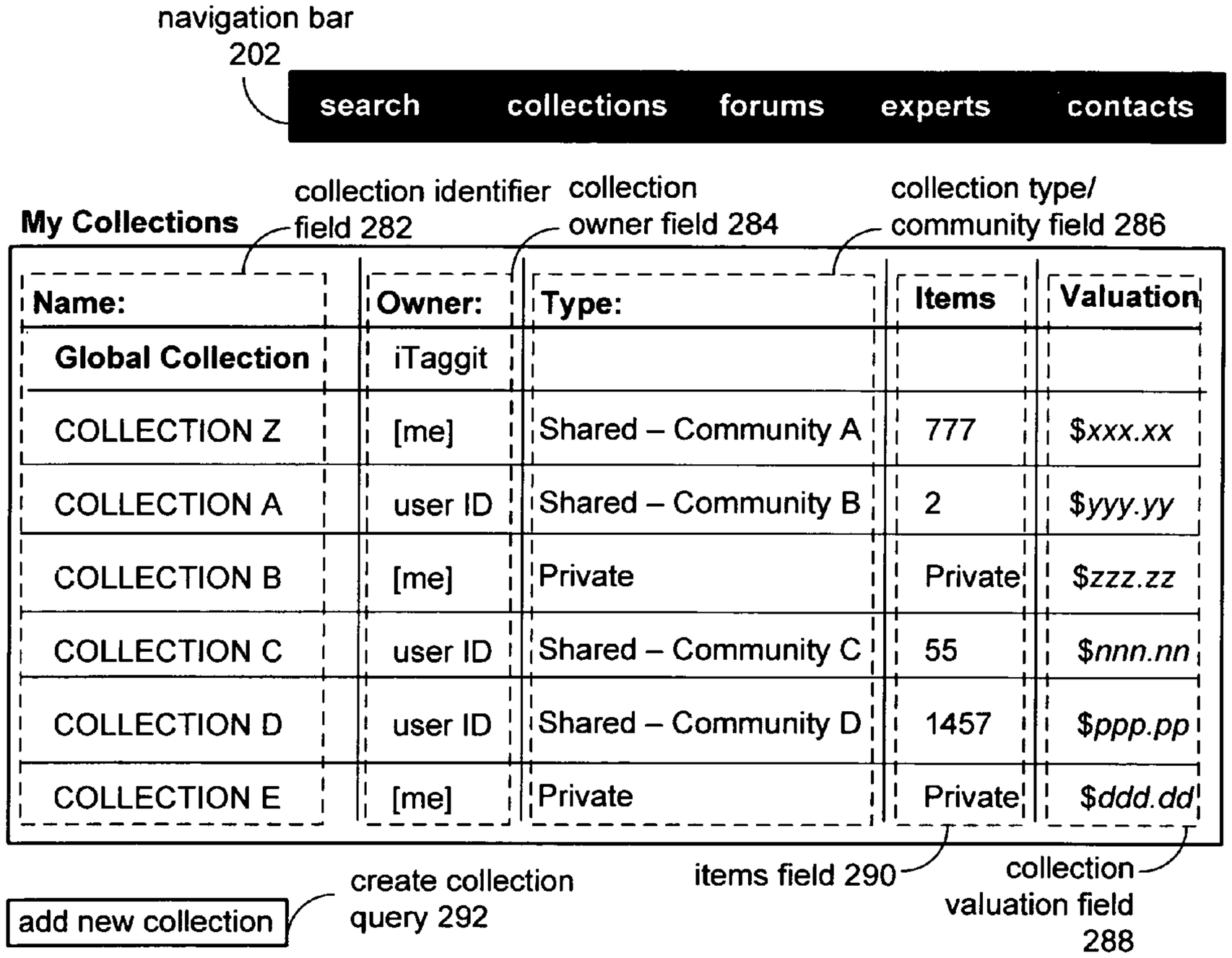


FIG. 9

collection summary web page 280

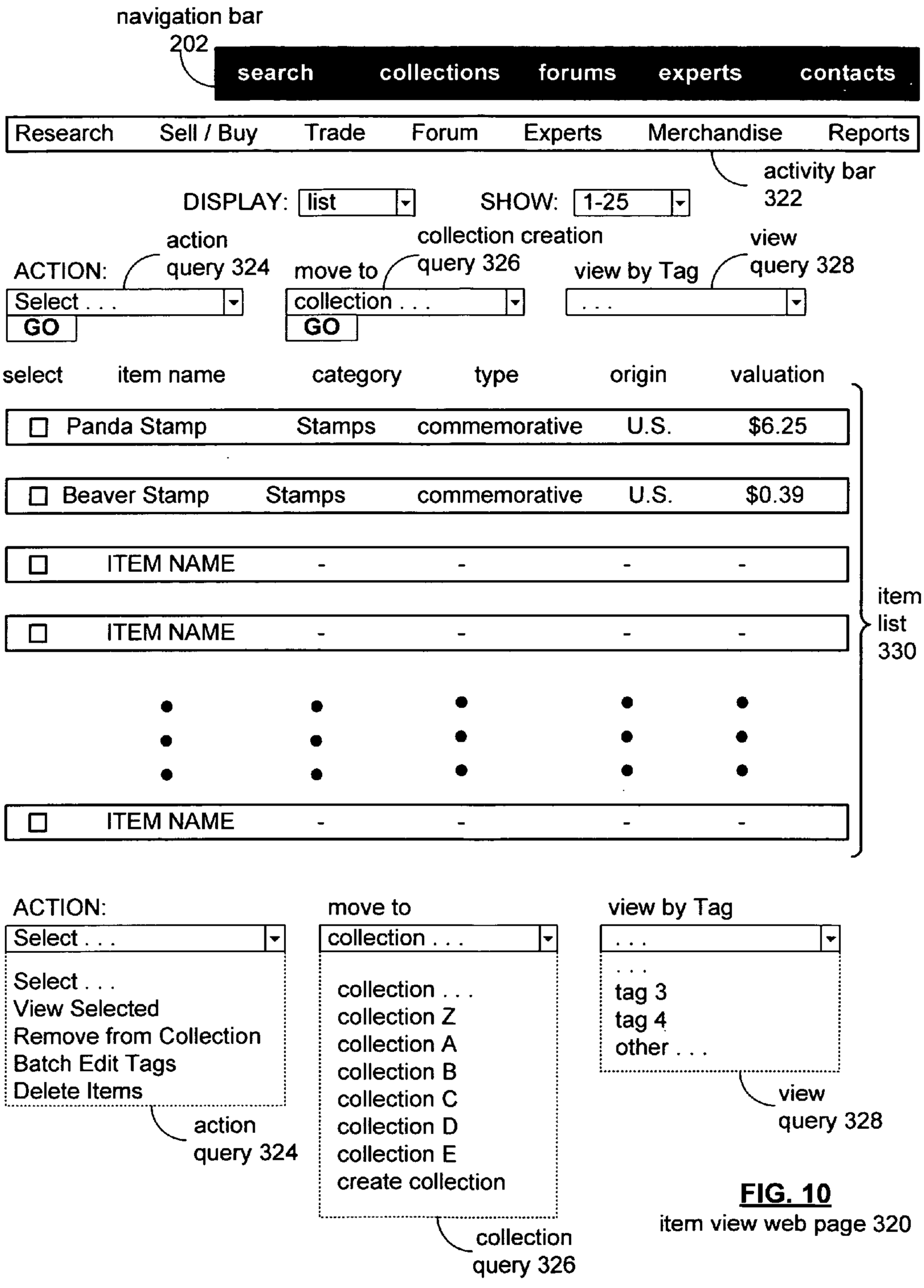


FIG. 10

item view web page 320

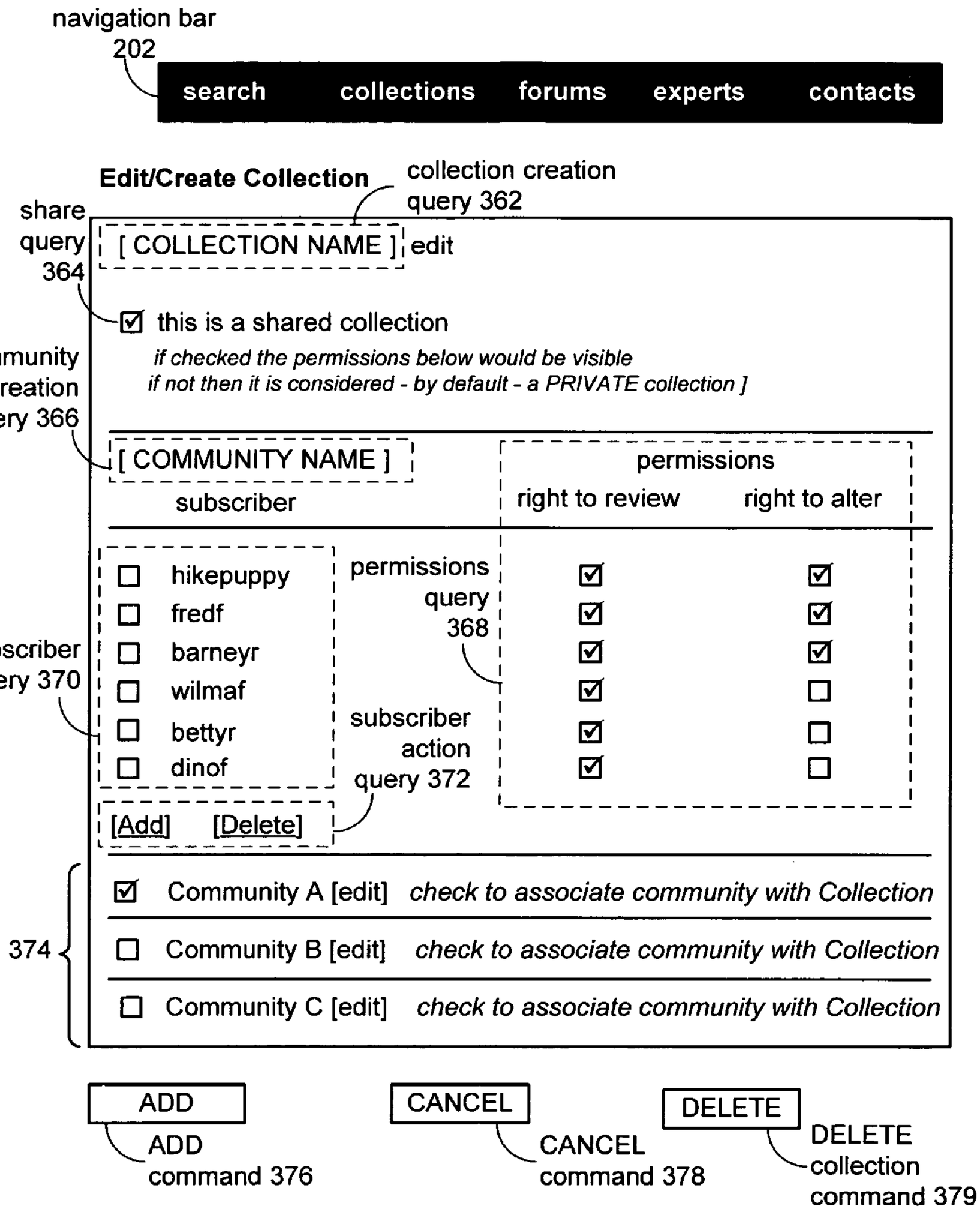


FIG. 11

edit/create collection GUI 360

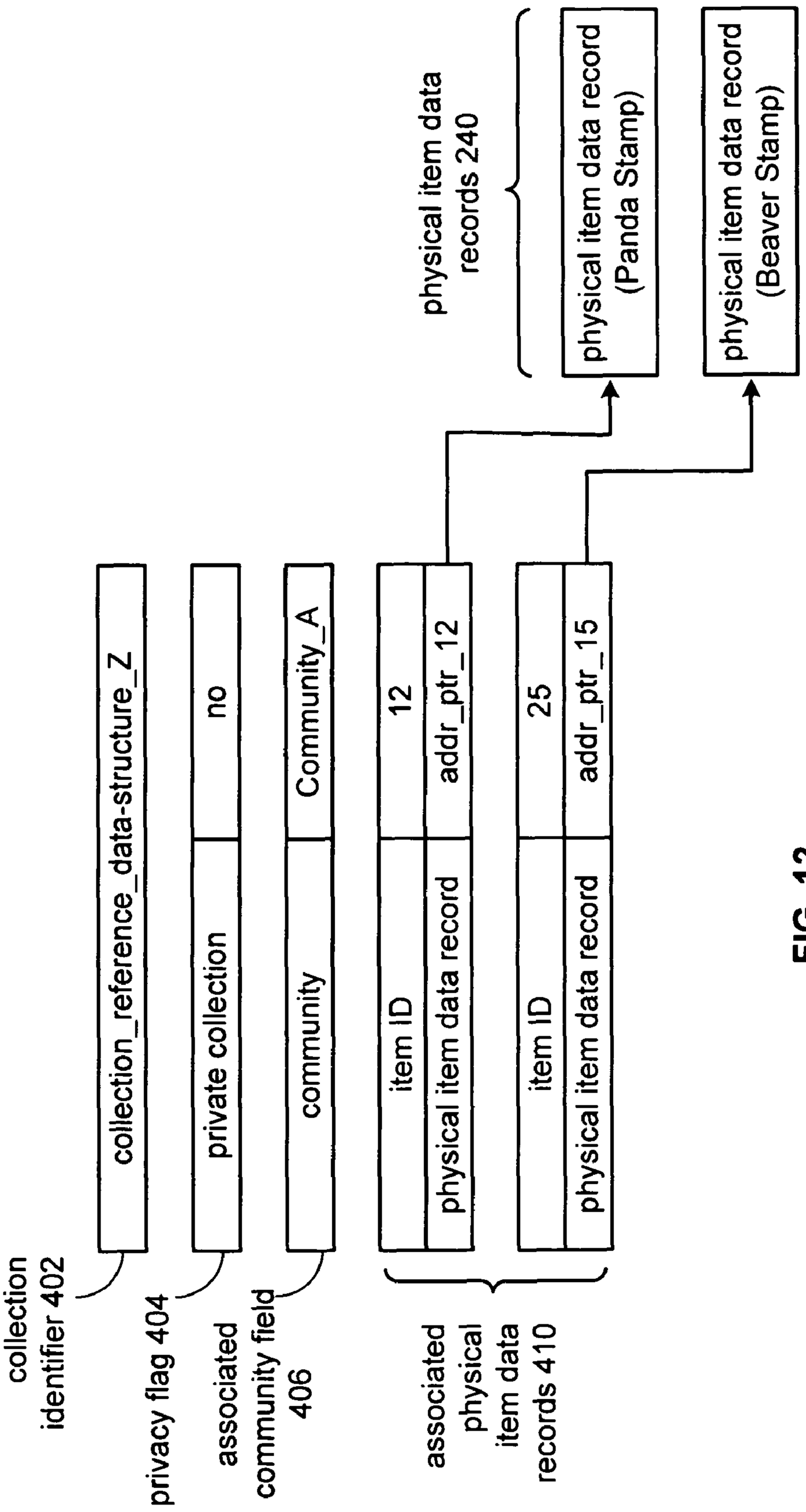


FIG. 12
collection reference
data structure 400

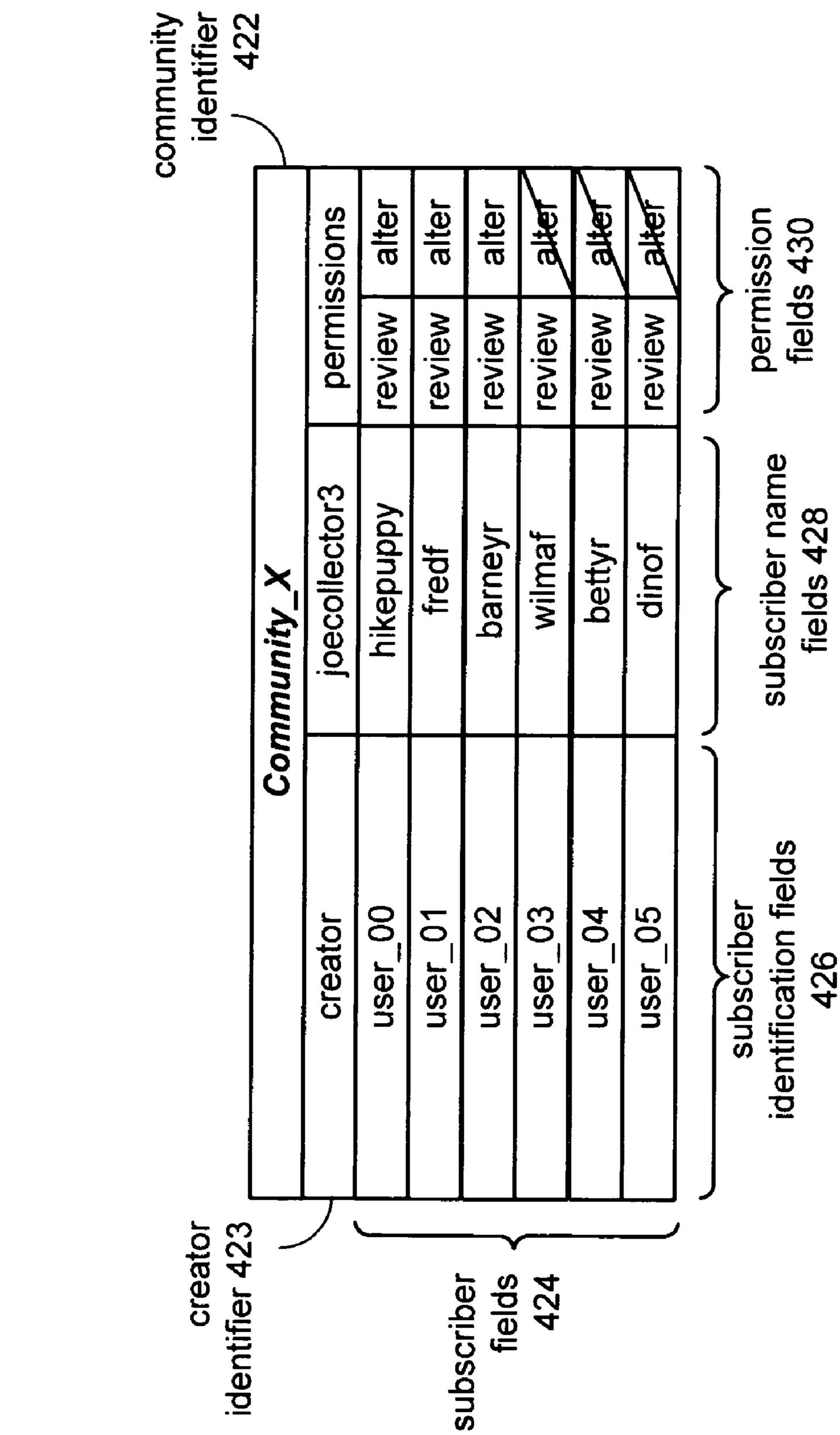


FIG. 13
community reference data structure 420

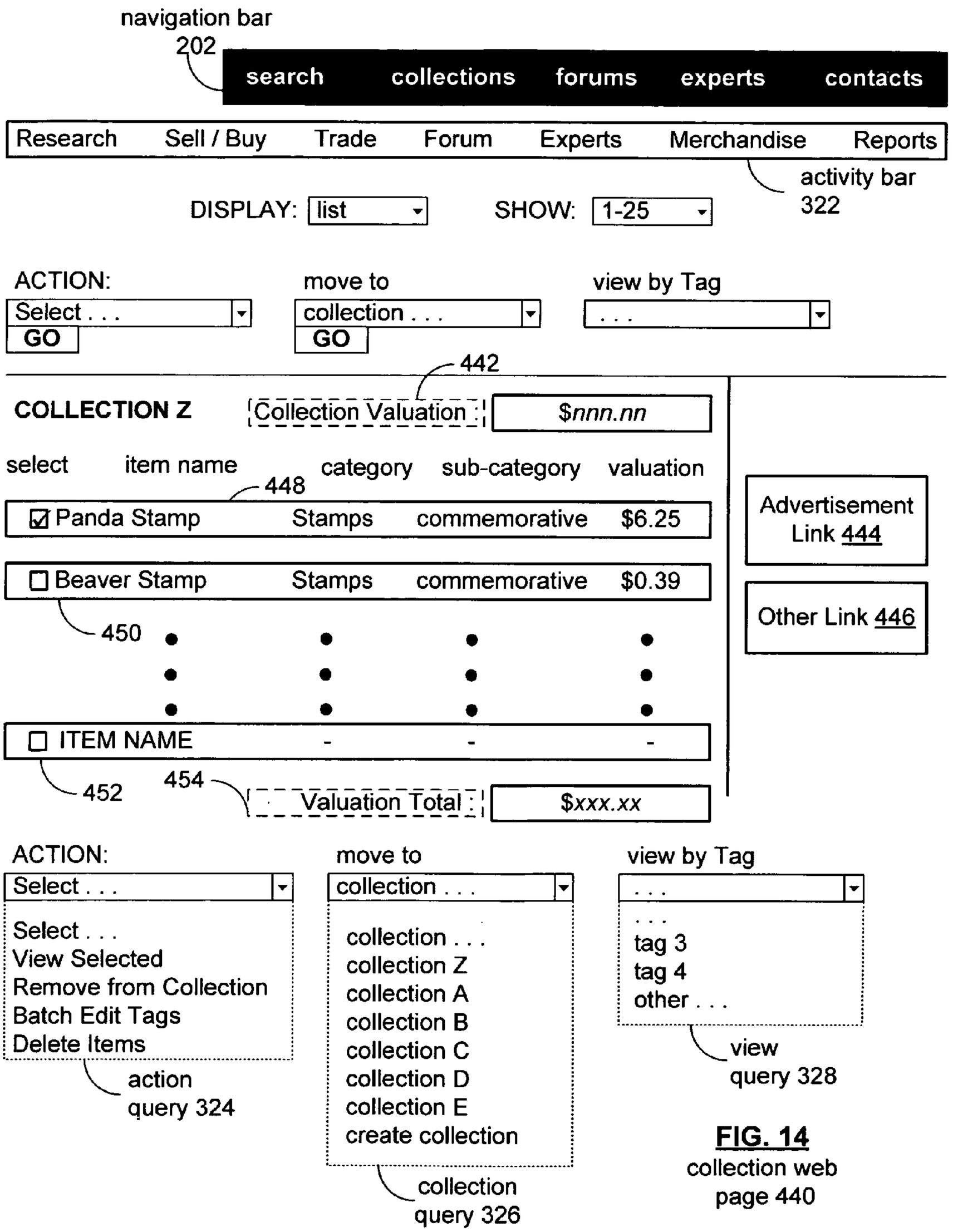


FIG. 14
collection web page 440

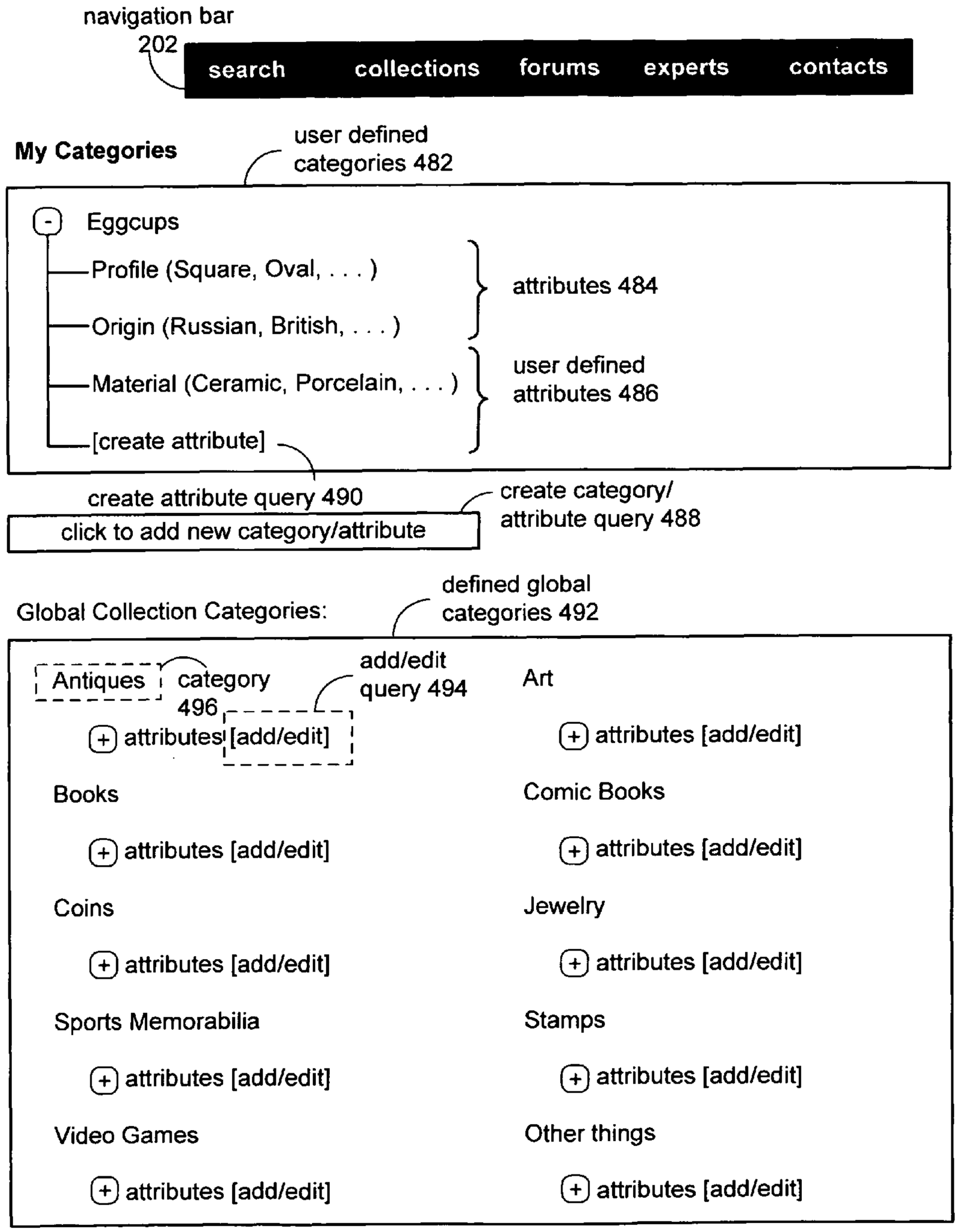


FIG. 15
category GUI 480

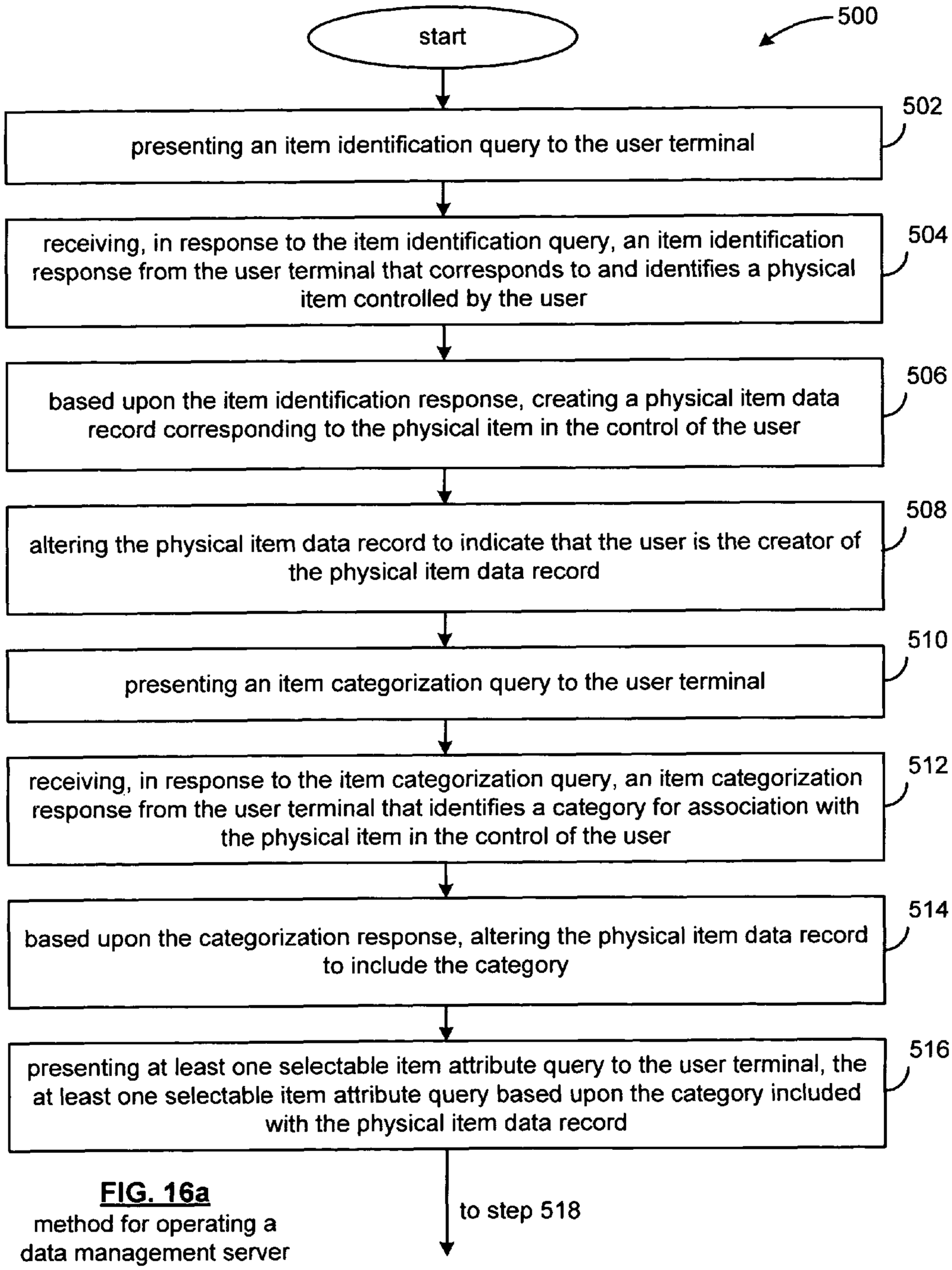


FIG. 16a
method for operating a data management server

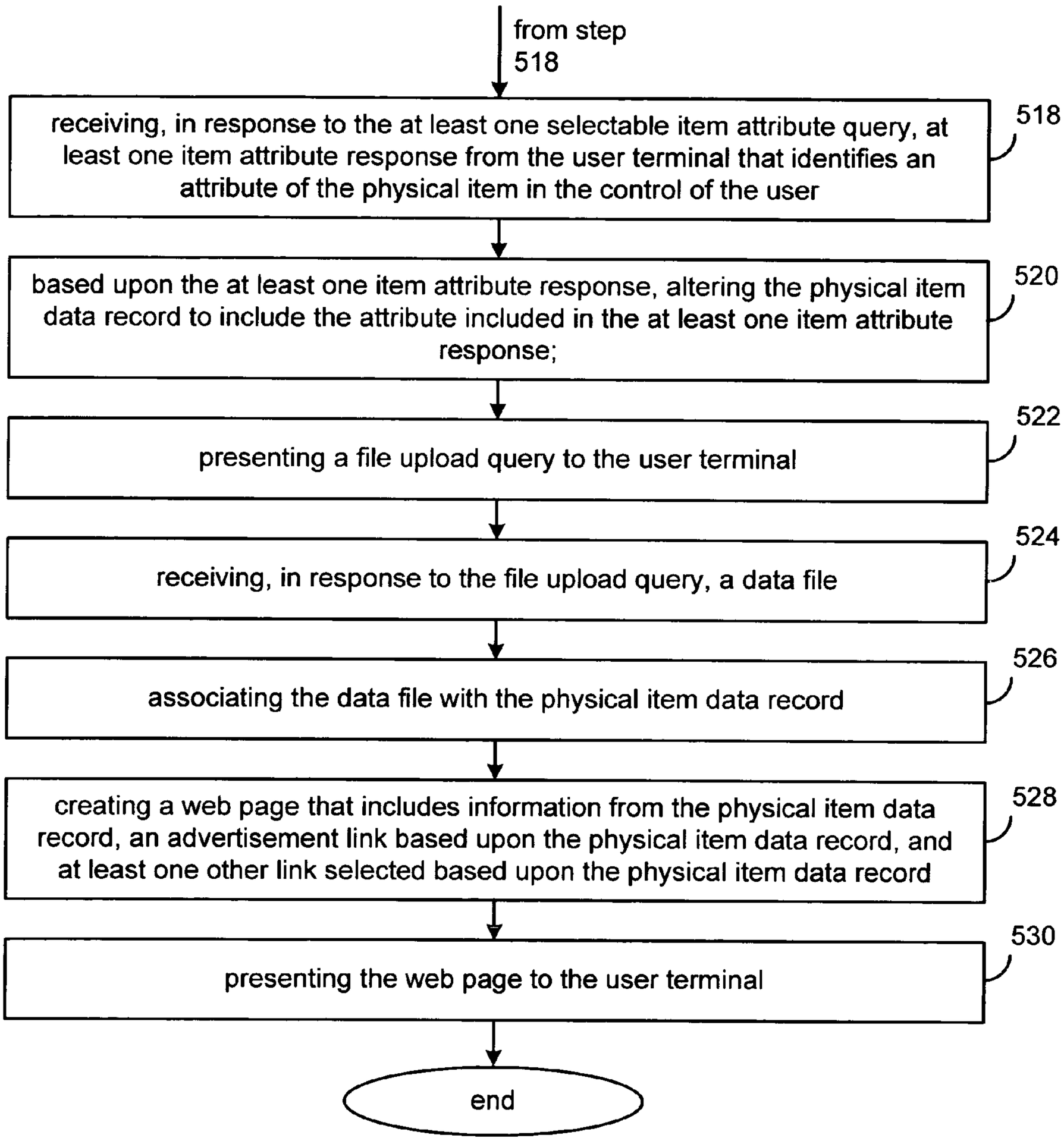


FIG. 16b
method for operating a
data management server

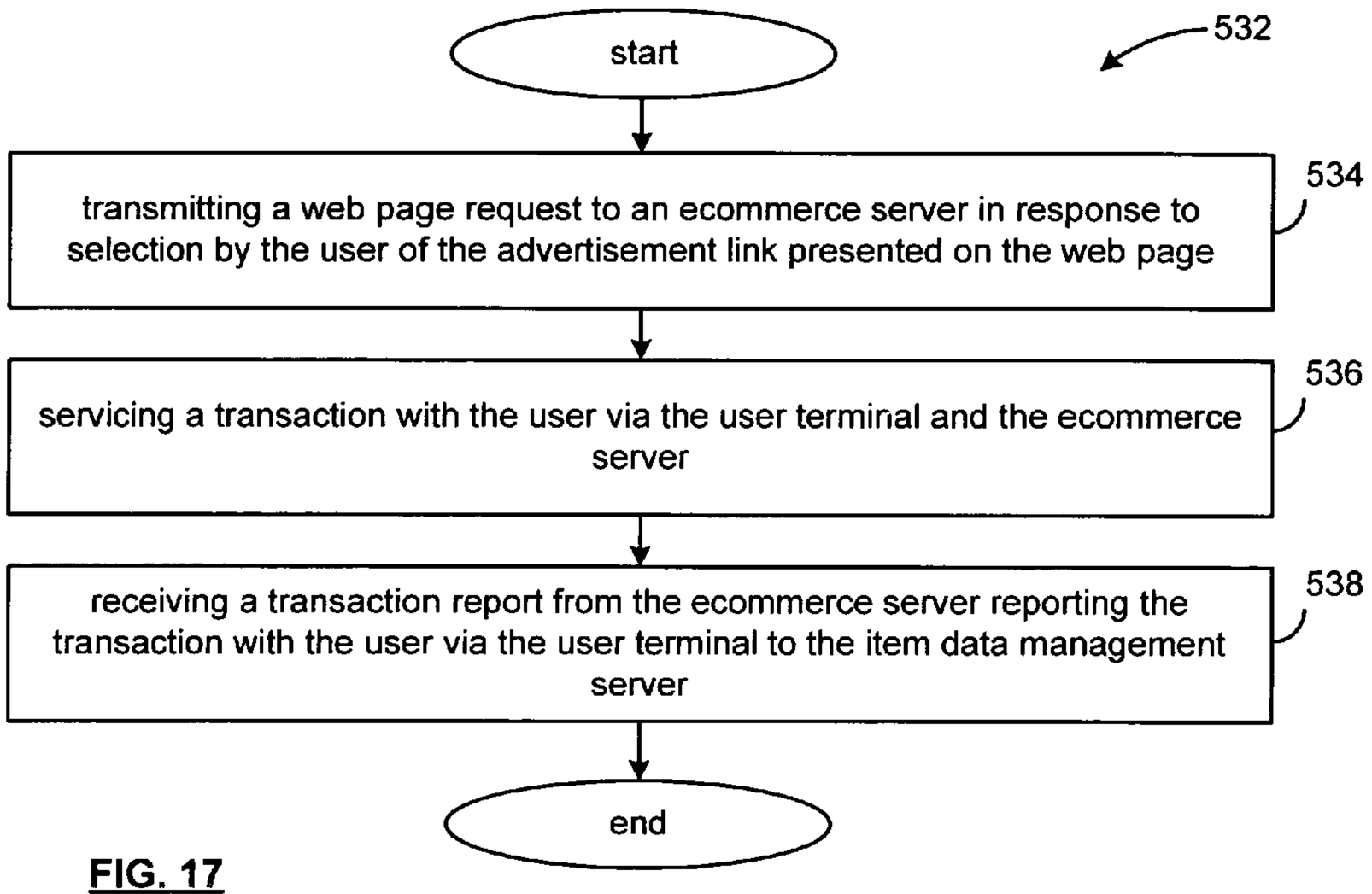

start
532
transmitting a web page request to an ecommerce server in response to selection by the user of the advertisement link presented on the web page
534
servicing a transaction with the user via the user terminal and the ecommerce server
536
receiving a transaction report from the ecommerce server reporting the transaction with the user via the user terminal to the item data management server
538
end

FIG. 17

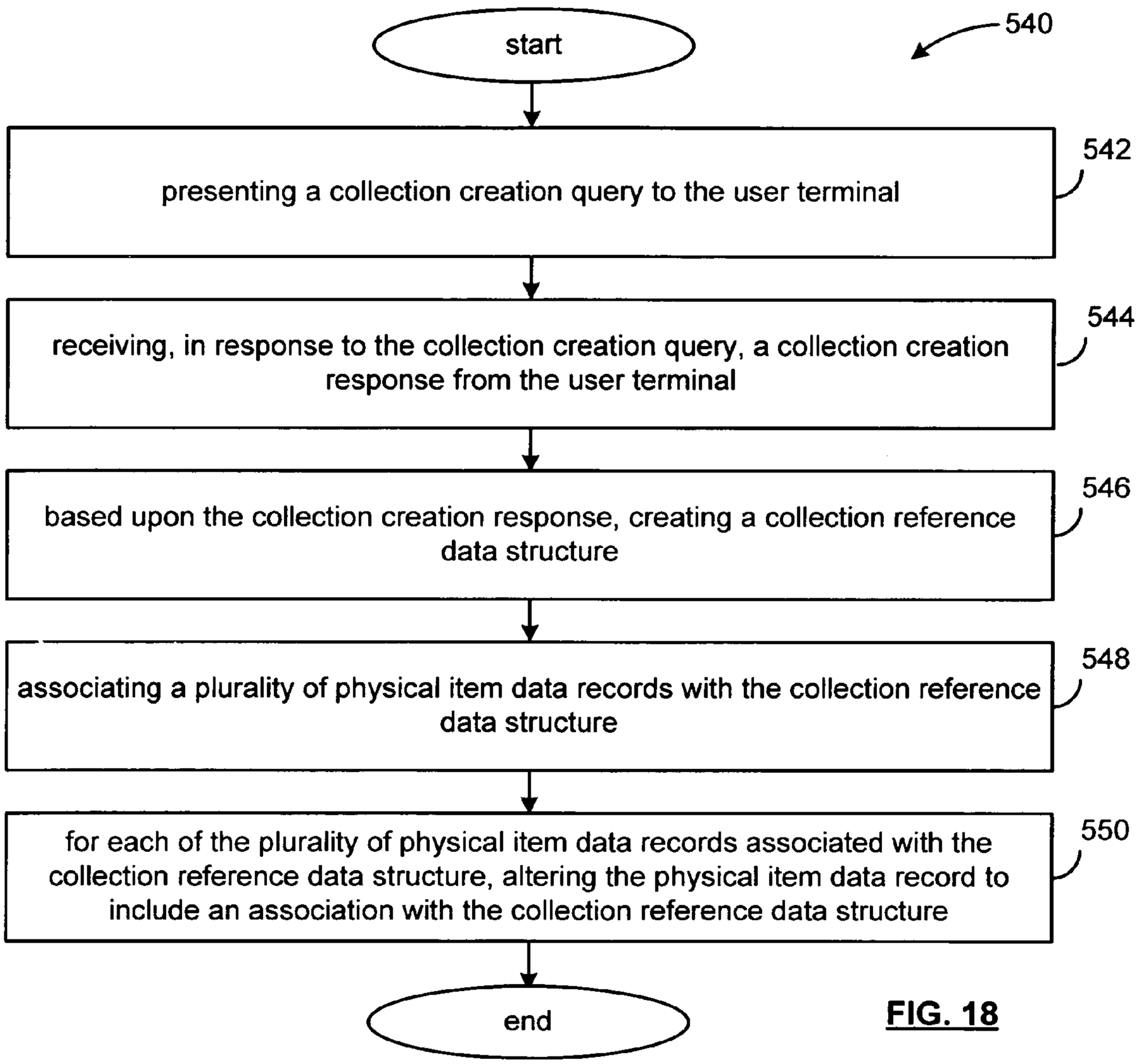

start
540
presenting a collection creation query to the user terminal
542
receiving, in response to the collection creation query, a collection creation response from the user terminal
544
based upon the collection creation response, creating a collection reference data structure
546
associating a plurality of physical item data records with the collection reference data structure
548
for each of the plurality of physical item data records associated with the collection reference data structure, altering the physical item data record to include an association with the collection reference data structure
550
end

FIG. 18

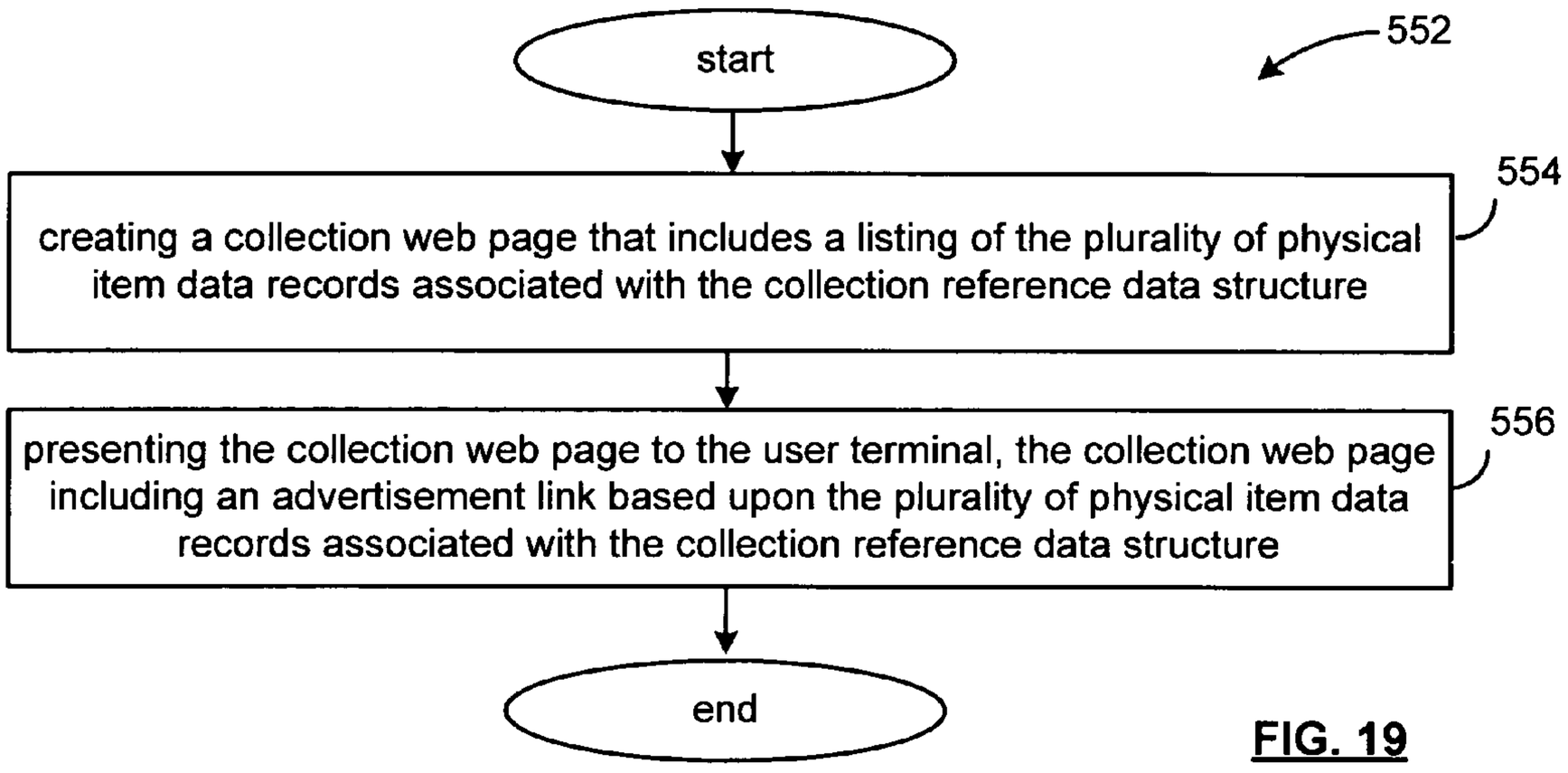

start
552
creating a collection web page that includes a listing of the plurality of physical item data records associated with the collection reference data structure
554
presenting the collection web page to the user terminal, the collection web page including an advertisement link based upon the plurality of physical item data records associated with the collection reference data structure
556
end

FIG. 19

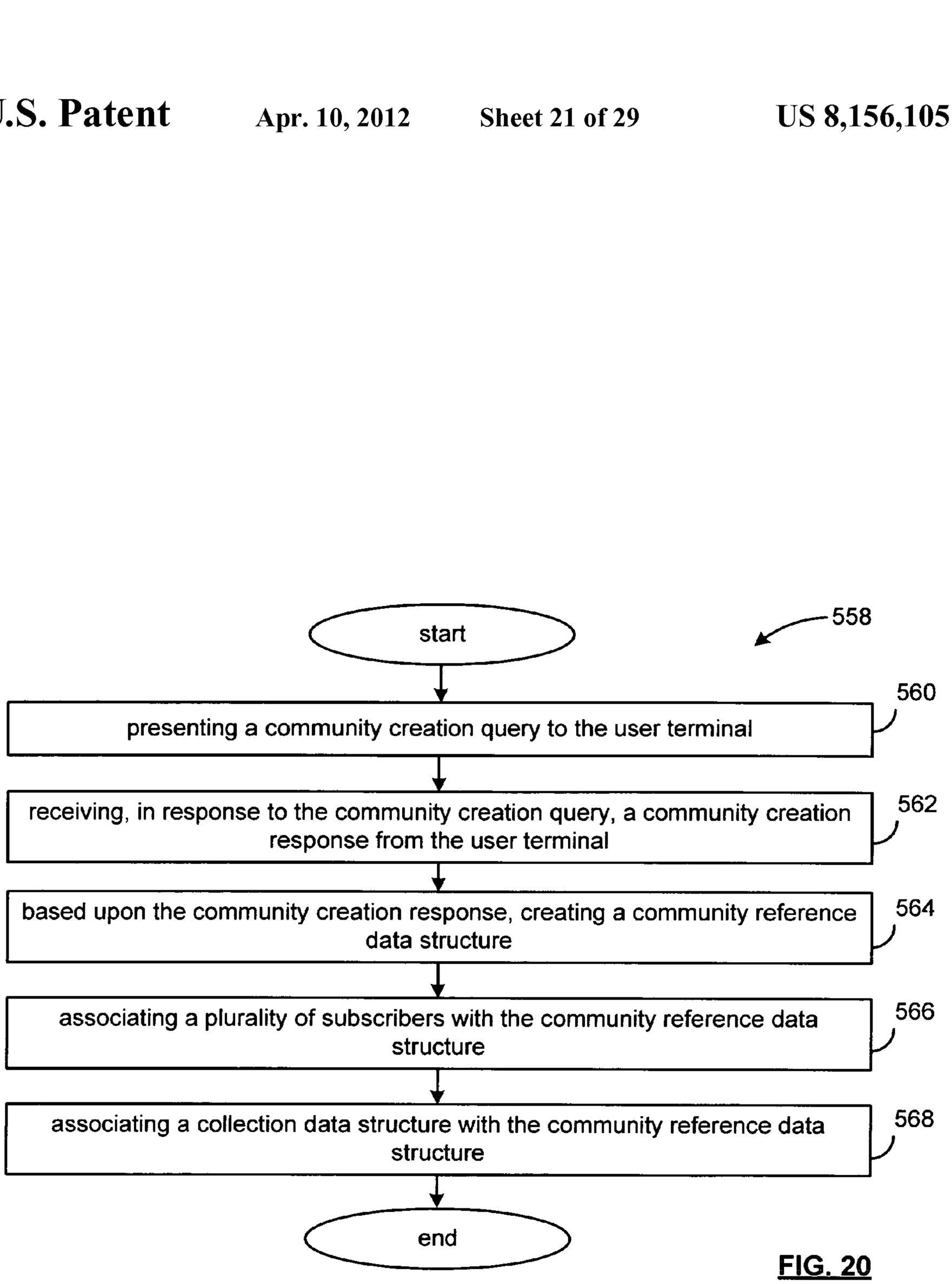

start
558
presenting a community creation query to the user terminal
560
receiving, in response to the community creation query, a community creation response from the user terminal
562
based upon the community creation response, creating a community reference data structure
564
associating a plurality of subscribers with the community reference data structure
566
associating a collection data structure with the community reference data structure
568
end

FIG. 20

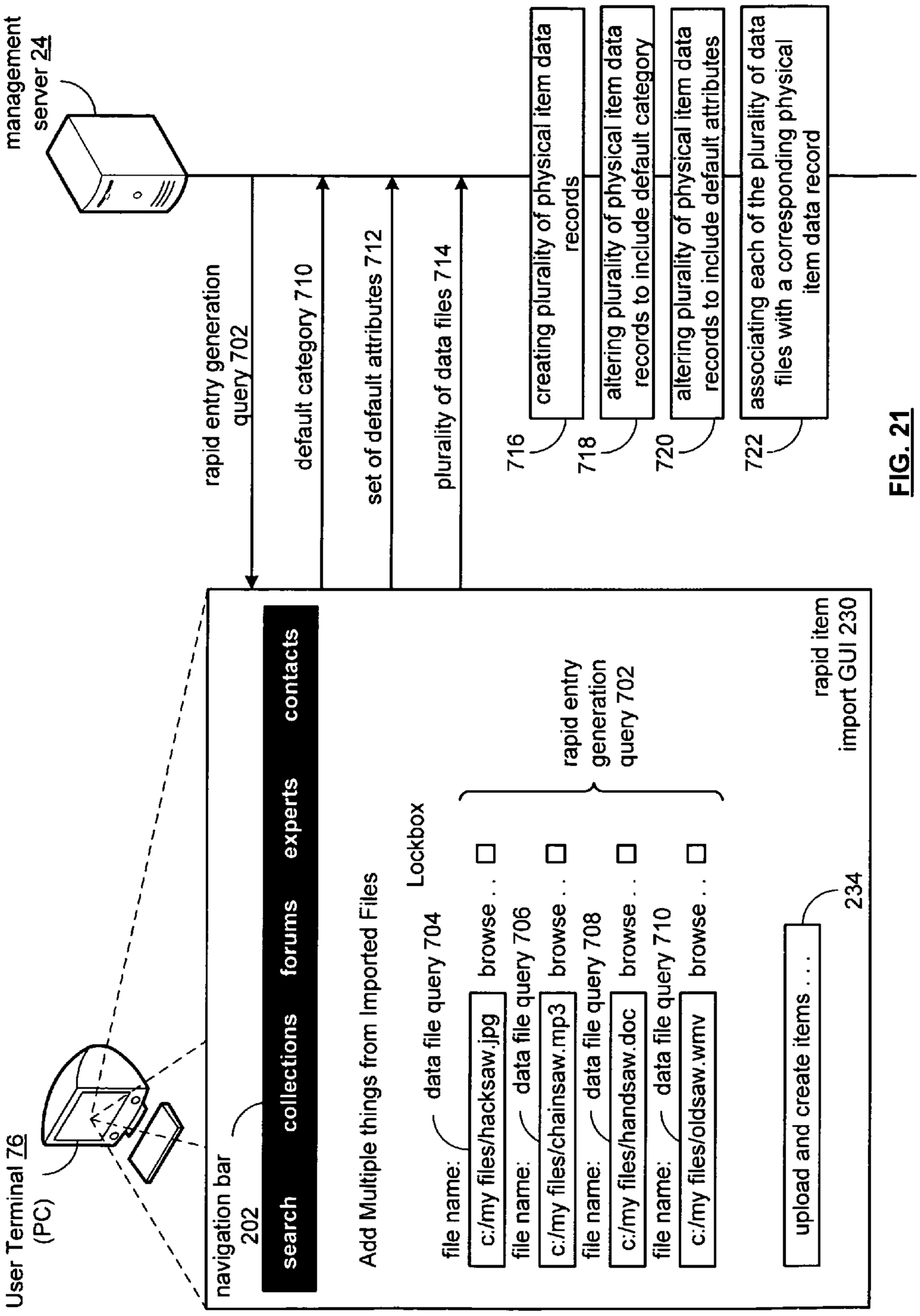

item data management server 24
rapid entry generation query 702
default category 710
set of default attributes 712
plurality of data files 714
creating plurality of physical item data records
716
altering plurality of physical item data records to include default category
718
altering plurality of physical item data records to include default attributes
720
associating each of the plurality of data files with a corresponding physical item data record
722
User Terminal 76 (PC)
navigation bar 202
search
collections
forums
experts
contacts
Add Multiple things from Imported Files
Lockbox
data file query 704
file name:
c:/my files/hacksaw.jpg
browse . . .
data file query 706
c:/my files/chainsaw.mp3
data file query 708
c:/my files/handsaw.doc
data file query 710
c:/my files/oldsaw.wmv
rapid entry generation query 702
upload and create items . . .
234
rapid item import GUI 230

FIG. 21

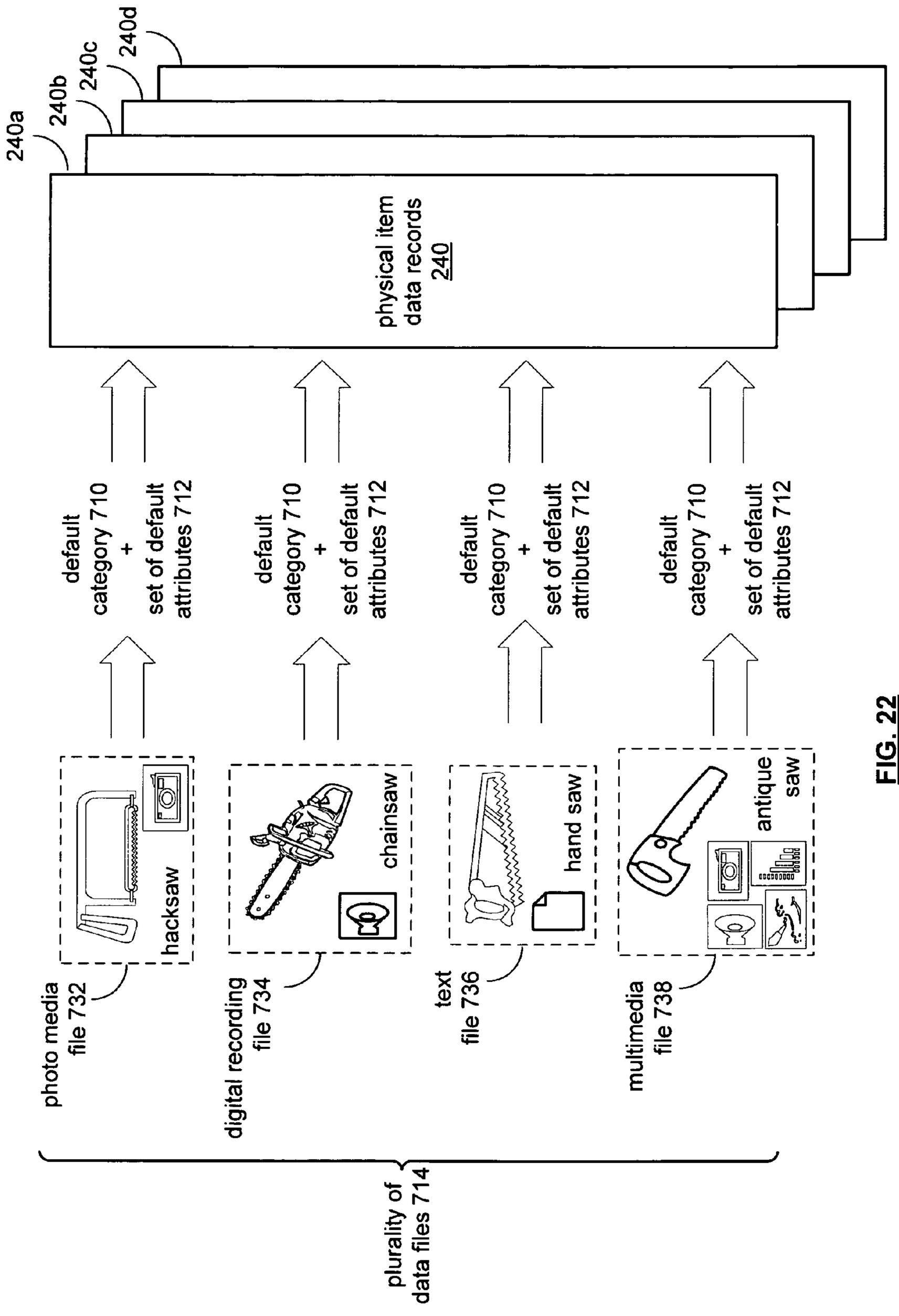

240a
240b
240c
240d
physical item data records 240
default category 710 + set of default attributes 712
default category 710 + set of default attributes 712
default category 710 + set of default attributes 712
default category 710 + set of default attributes 712
hacksaw
chainsaw
hand saw
antique saw
photo media file 732
digital recording file 734
text file 736
multimedia file 738
plurality of data files 714

FIG. 22

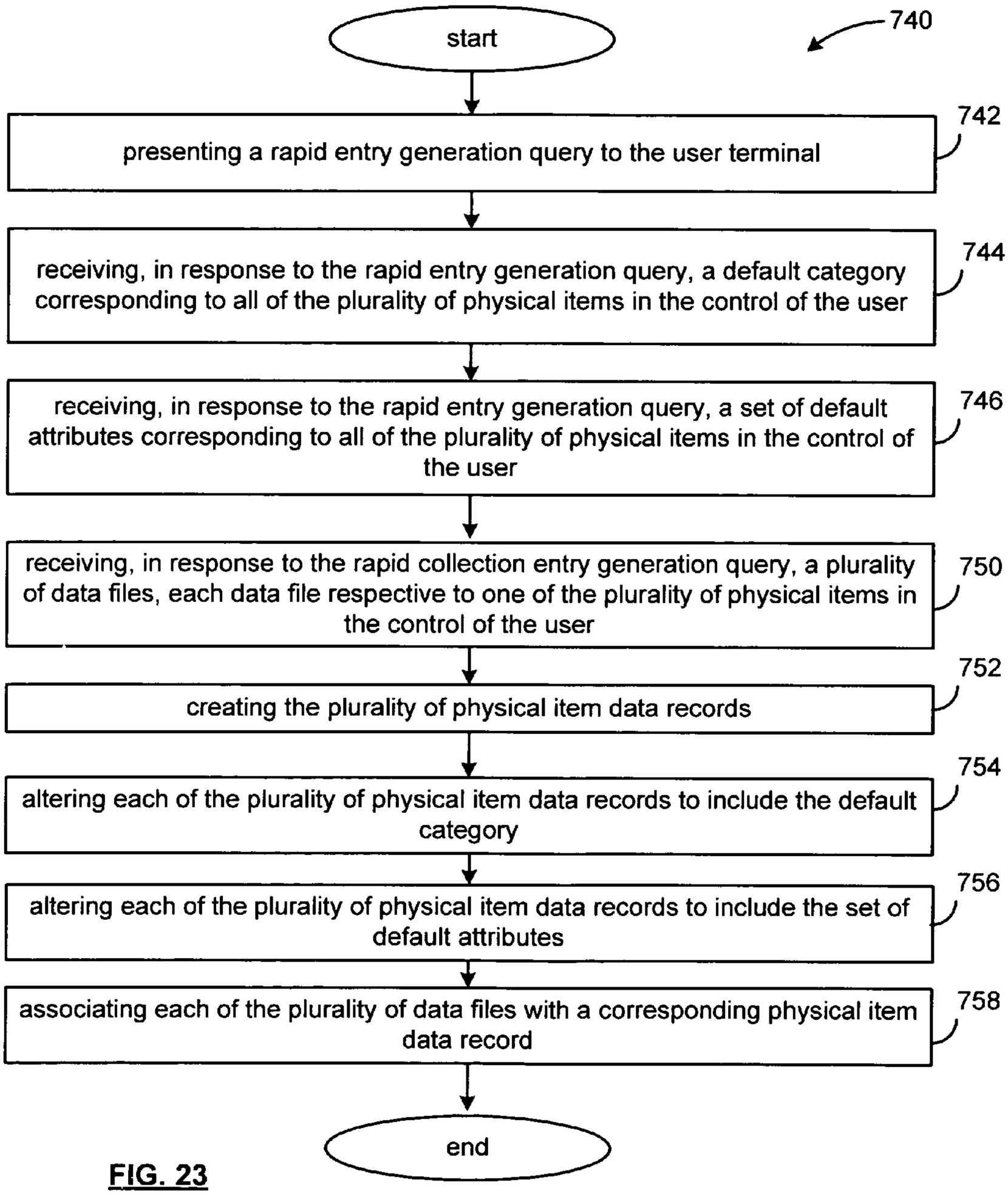

start
740
presenting a rapid entry generation query to the user terminal
742
receiving, in response to the rapid entry generation query, a default category corresponding to all of the plurality of physical items in the control of the user
744
receiving, in response to the rapid entry generation query, a set of default attributes corresponding to all of the plurality of physical items in the control of the user
746
receiving, in response to the rapid collection entry generation query, a plurality of data files, each data file respective to one of the plurality of physical items in the control of the user
750
creating the plurality of physical item data records
752
altering each of the plurality of physical item data records to include the default category
754
altering each of the plurality of physical item data records to include the set of default attributes
756
associating each of the plurality of data files with a corresponding physical item data record
758
end

FIG. 23

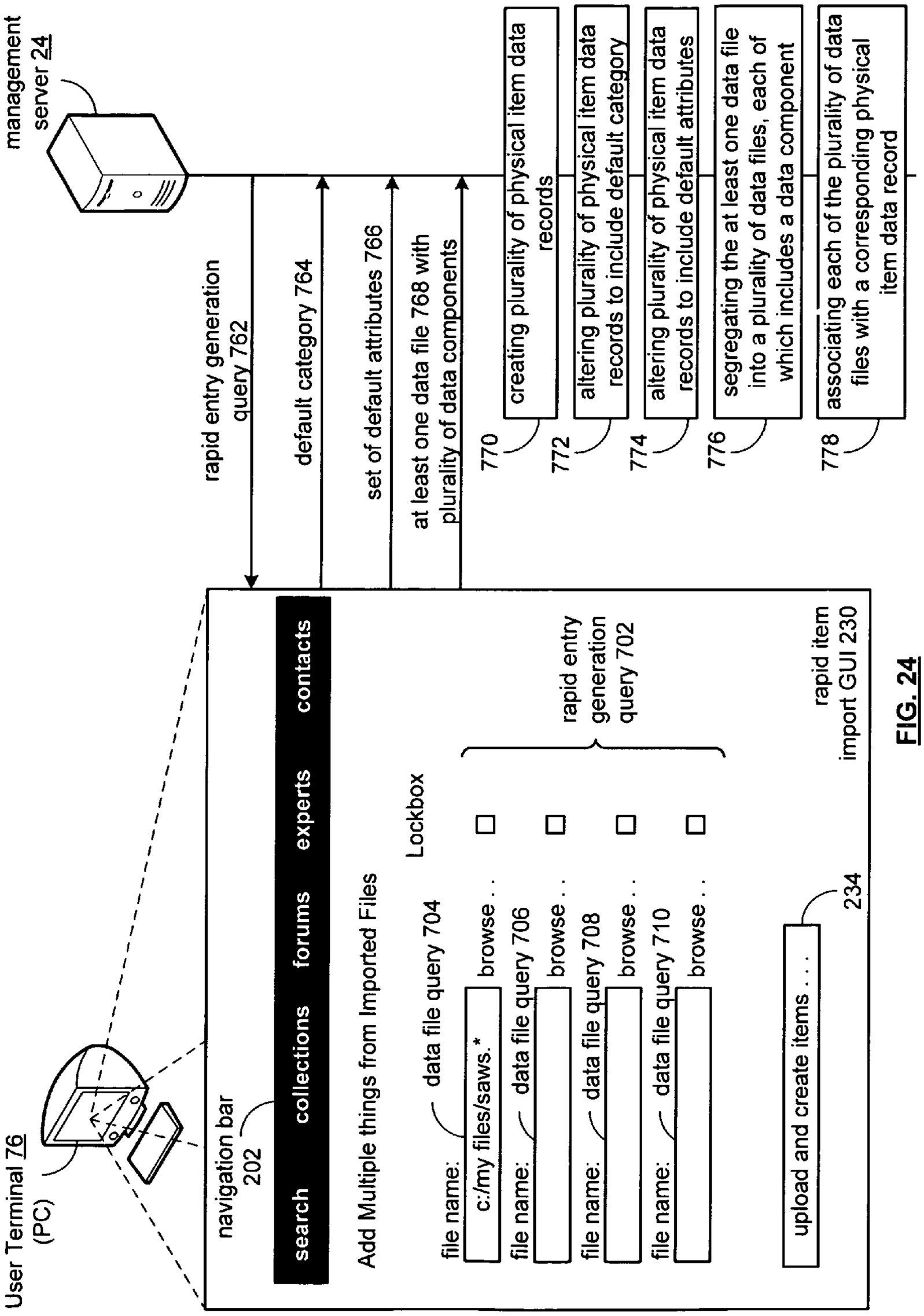

item data management server 24
rapid entry generation query 762
default category 764
set of default attributes 766
at least one data file 768 with plurality of data components
770
creating plurality of physical item data records
772
altering plurality of physical item data records to include default category
774
altering plurality of physical item data records to include default attributes
776
segregating the at least one data file into a plurality of data files, each of which includes a data component
778
associating each of the plurality of data files with a corresponding physical item data record
User Terminal 76 (PC)
navigation bar 202
search
collections
contacts
experts
forums
Add Multiple things from Imported Files
Lockbox
rapid entry generation query 702
rapid item import GUI 230
data file query 704
file name:
c:/my files/saws.*
browse . . .
data file query 706
file name:
browse . . .
data file query 708
file name:
browse . . .
data file query 710
file name:
browse . . .
upload and create items . . .
234

FIG. 24

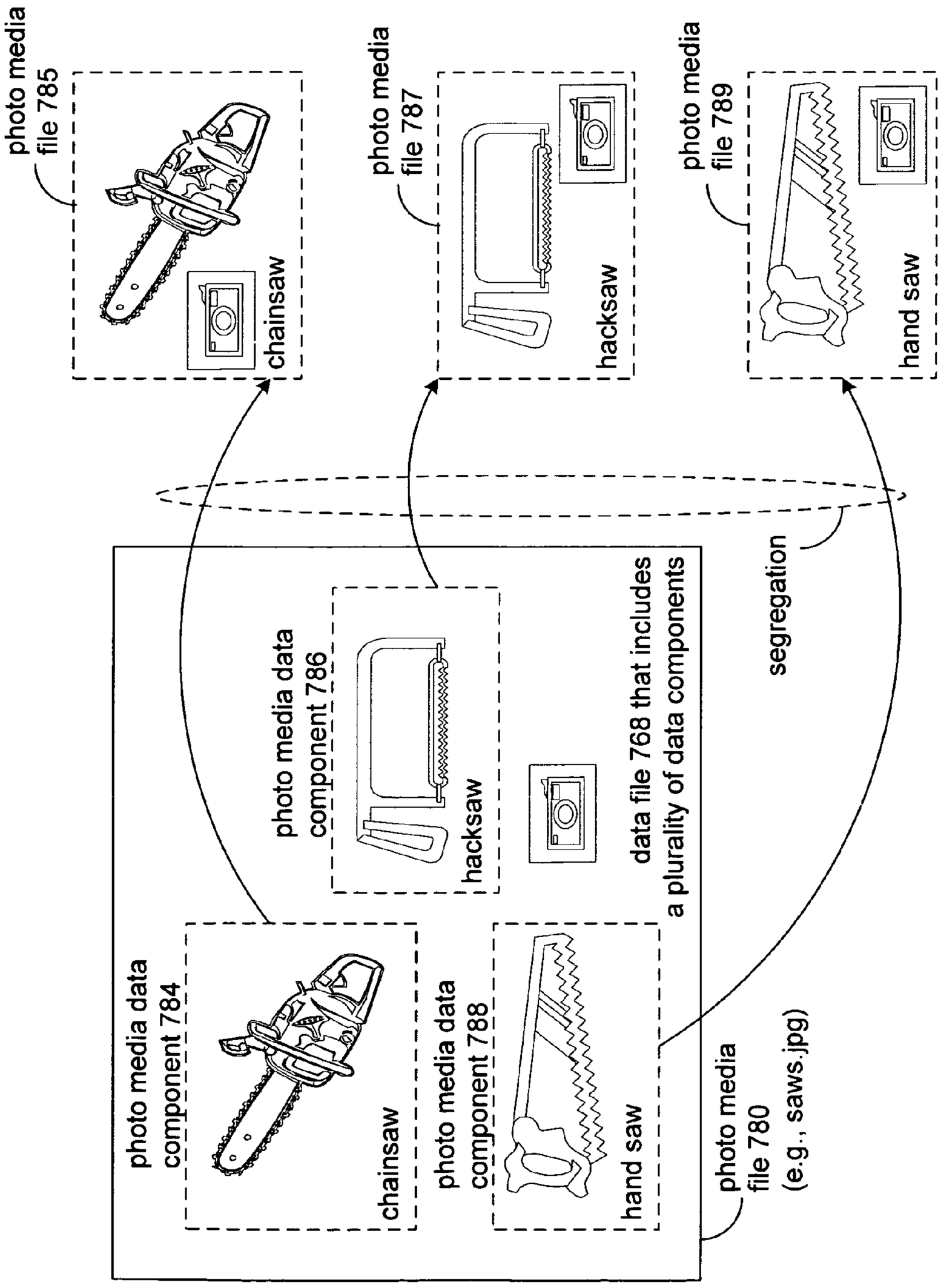


photo media file 785
chainsaw
photo media file 787
hacksaw
photo media file 789
hand saw
segregation
photo media data component 786
hacksaw
data file 768 that includes a plurality of data components
photo media data component 784
chainsaw
photo media data component 788
hand saw
photo media file 780 (e.g., saws.jpg)

FIG. 25

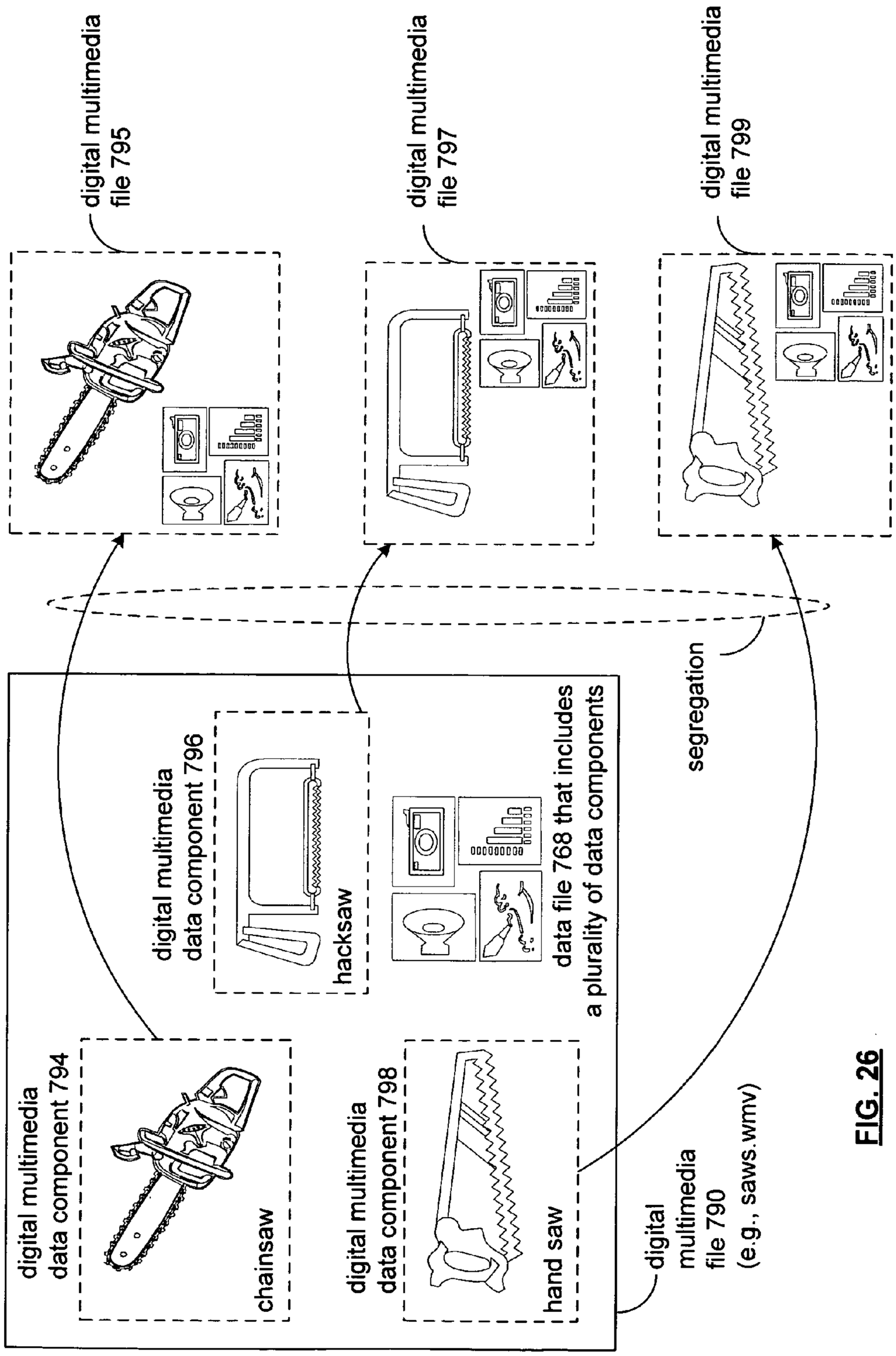

digital multimedia file 795
digital multimedia file 797
digital multimedia file 799
segregation
digital multimedia data component 796
hacksaw
data file 768 that includes a plurality of data components
digital multimedia data component 794
chainsaw
digital multimedia data component 798
hand saw
digital multimedia file 790 (e.g., saws.wmv)

FIG. 26

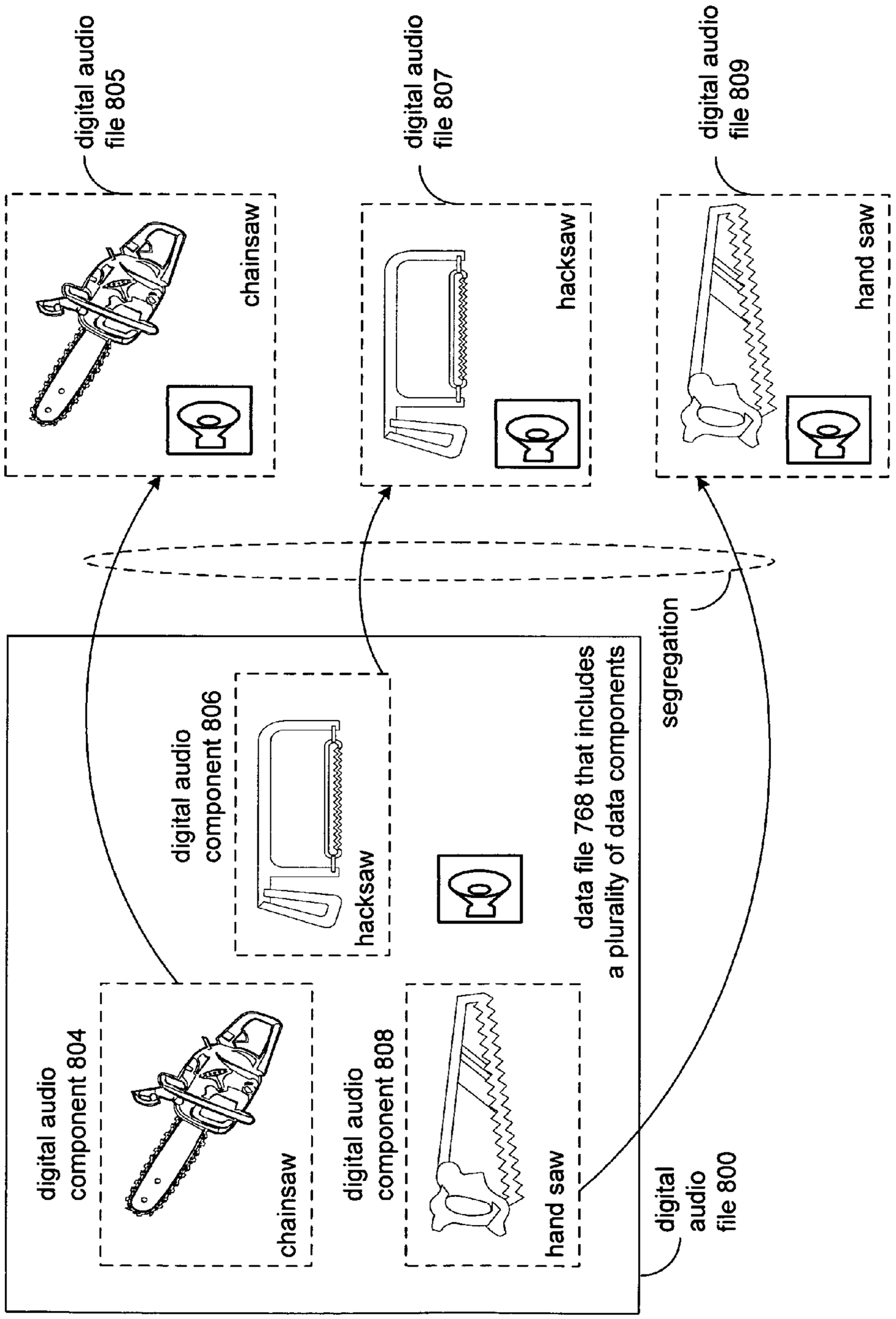

digital audio file 805
chainsaw
digital audio file 807
hacksaw
digital audio file 809
hand saw
segregation
digital audio component 806
hacksaw
data file 768 that includes a plurality of data components
digital audio component 804
chainsaw
digital audio component 808
hand saw
digital audio file 800

FIG. 27

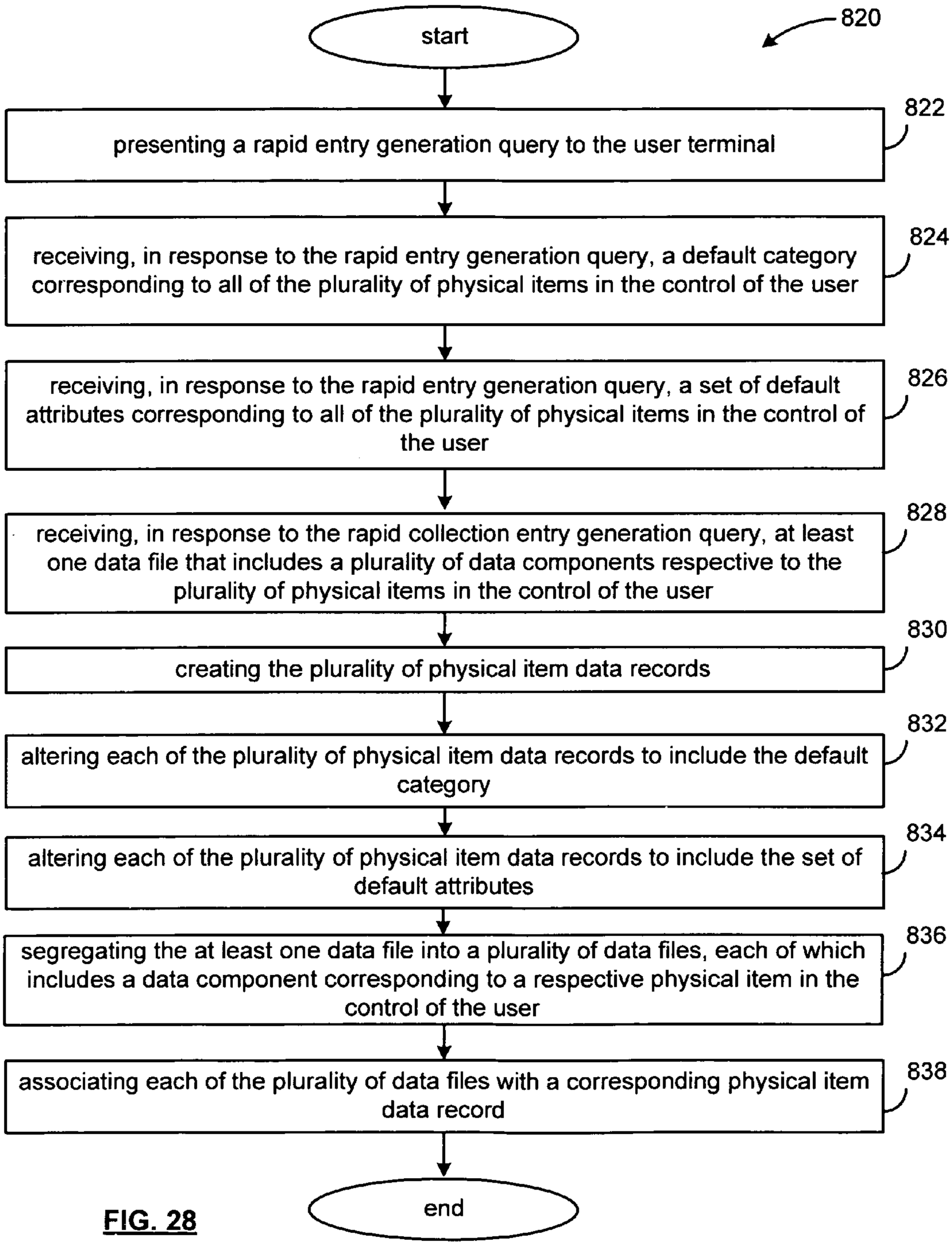

start
820
presenting a rapid entry generation query to the user terminal
822
receiving, in response to the rapid entry generation query, a default category corresponding to all of the plurality of physical items in the control of the user
824
receiving, in response to the rapid entry generation query, a set of default attributes corresponding to all of the plurality of physical items in the control of the user
826
receiving, in response to the rapid collection entry generation query, at least one data file that includes a plurality of data components respective to the plurality of physical items in the control of the user
828
creating the plurality of physical item data records
830
altering each of the plurality of physical item data records to include the default category
832
altering each of the plurality of physical item data records to include the set of default attributes
834
segregating the at least one data file into a plurality of data files, each of which includes a data component corresponding to a respective physical item in the control of the user
836
associating each of the plurality of data files with a corresponding physical item data record
838
end

FIG. 28

RAPID ITEM DATA ENTRY FOR PHYSICAL ITEMS IN THE CONTROL OF A USER IN AN ITEM DATA MANAGEMENT SERVER

CROSS-REFERENCE TO RELATED APPLICATIONS

The present application is a continuation-in-part of and claims the benefit of U.S. application Ser. No. 11/486,709, filed Jul. 14, 2006, for "Item Data Management over a Data Network for Physical Items in the Control of a User," which claims priority pursuant to 35 U.S.C. §119(e) to U.S. Provisional Application Ser. No. 60/771,135, filed Feb. 6, 2006, to U.S. Provisional Application Ser. No. 60/743,733, filed Mar. 24, 2006, to U.S. Provisional Application Ser. No. 60/743,735, filed Mar. 24, 2006, to U.S. Provisional Application Ser. No. 60/743,734, filed Mar. 24, 2006, to U.S. Provisional Application Ser. No. 60/743,737, filed Mar. 24, 2006, and to U.S. Provisional Application Ser. No. 60/743,736, filed Mar. 24, 2006, all of which are hereby incorporated by reference in their entirety.

BACKGROUND

1. Technical Field

The present invention relates generally to server systems accessible by user terminals, and more particularly to server systems providing physical item database services to users over a network.

2. Related Art

Historically, collectors, business owners, and others have kept written listings and/or ledgers that identify their physical items, whether they are collectibles, household possessions, business equipment, product inventory, or other physical items. The written listings/ledgers typically included additional information regarding the physical items, for example, quantity, value, physical characteristics, model number, serial number, et cetera. Generation of these listings/ledgers was difficult. Further, when the status of the physical items represented in the written listing/ledger changed, it was very difficult to alter the written listings/ledgers to represent the change in status.

As technology advanced, computer based inventory programs replaced written listings/ledgers. While the computer based programs moved the record keeping from a hand-written to an electronic format, the burdensome data entry and organizational requirements for interacting with the computer based inventory programs remained with the user. Data entry for dissimilar physical items still necessitated repeating the input process multiple times, even when using a computer-based program.

Often, collectors, business owners, and others required information relating to their physical items once the data was entered into the system. In obtaining this information, these persons accessed the Internet, particularly looking to ecommerce sites for such information. Ecommerce sites, however, had generated information that was limited to specific search terms selected by a user, and not based upon the items in the user's control. That is, information returned in a search tool is limited to the capability of the user to generate a sufficient search string—that is, to have the requisite "knowledge to know what they do not know." As a result, time and energy was needlessly expended refining a search that in the end may not render a suitable result for the user.

Accordingly, a need exists to increase the efficiency for creation, data entry and organization of physical items with computer-based inventories, including the information for the physical items.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a functional block diagram illustrating a communication system with an item data management server according to an embodiment of the invention;

FIG. **2** is a block diagram that provides a system level overview of the item data management server according to an embodiment of the invention;

FIG. **3** is a block diagram of a system level operation illustrating a functional or client level operation of a user terminal with the item data management server across a data network according to an embodiment of the invention;

FIG. **4** is a block diagram depicting interaction between a user terminal and an item data management server according to an embodiment of the invention;

FIG. **5** is an illustration of an add physical item graphic user interface provided to the user for input and output through the user terminal according to an embodiment of the invention;

FIG. **6** is an illustration of a multiple item import graphic user interface that may be provided to a user for input and output through the user terminal according to an embodiment of the invention;

FIG. **7** is an illustration of a physical item data record according to an embodiment of the invention;

FIG. **8** is an illustration of a web page created by the item data management server according to an embodiment of the invention;

FIG. **9** is an illustration of a collection summary web page created by the item data management server according to an embodiment of the present invention;

FIG. **10** is an illustration of an item view web page that the item data management server presents to the user via the user terminal according to an embodiment of the invention;

FIG. **11** is an illustration of an edit/create collection graphic user interface according to an embodiment of the invention;

FIG. **12** is an illustration of a collection reference data structure according to an embodiment of the invention;

FIG. **13** is an illustration of a community reference data structure according to an embodiment of the invention;

FIG. **14** is an illustration of a collection web page according to an embodiment of the invention;

FIG. **15** is an illustration of a category graphic user interface according to an embodiment of the invention;

FIGS. **16***a* and **16***b* are flow diagrams illustrating a method in an item data management server to capture, store, organize, and present information regarding a plurality of physical items in the control of a user according to an embodiment of the invention;

FIG. **17** is a flow diagram illustrating a method for further engaging an ecommerce server according to an embodiment of the invention;

FIG. **18** is a flow diagram illustrating a method for further engaging in collection web page creation according to an embodiment of the invention;

FIG. **19** is a flow diagram illustrating a method for further creating a collection web page according to an embodiment of the invention;

FIG. **20** is a flow diagram illustrating a method for further creating a community reference data structure according to an embodiment of the invention;

FIG. **21** is a signal flow diagram for creating a plurality of physical item data records with the item data management server via a rapid item import graphic user interface according to an embodiment of the invention;

FIG. **22** illustrates a plurality of data files that the item data management server associates with the physical item data records according to an embodiment of the invention;

FIG. **23** is a flow diagram illustrating a method in an item data management server to create a plurality of physical item data records corresponding to a plurality of physical items in the control of a user according to an embodiment of the invention;

FIG. **24** is another signal flow diagram relating to creating a plurality of physical item data records with the item data management server via a rapid item import graphic user interface according to an embodiment of the invention;

FIG. **25** illustrates a photo media file that includes a plurality of data components according to an embodiment of the invention;

FIG. **26** illustrates a digital multimedia file that includes a plurality of data components, which the item data management server receives in response to a rapid entry generation query **762** according to an embodiment of the invention;

FIG. **27** illustrates a digital audio file **790** that includes a plurality of data components, which the item data management server receives in response to a rapid entry generation query according to an embodiment of the invention; and

FIG. **28** is a flow diagram illustrating a further method in an item data management server to create a plurality of physical item data records corresponding to a plurality of physical items in the control of a user according to an embodiment of the invention.

DETAILED DESCRIPTION OF THE DRAWINGS

FIG. **1** is a functional block diagram illustrating a communication system **10** that includes circuit devices and network elements and operation thereof with an item data management server according to one embodiment of the invention. More specifically, the communication system **10** includes a network service area **14**, or basic service sets ("BSS"), and a plurality of communication devices coupled via a data network **22**. The network service area **14** is coupled to the data network **22** through a base station or access point **20**. The wireless communications devices of the network service area **14** may include a personal digital assistant ("PDA") **16**, personal computers **18**, which may be a desktop computer or a laptop computer, and/or a cellular telephone **19**.

The base station or access point **14** has an associated antenna or antenna array to communicate with the wireless communication devices in its service area. Typically, the wireless communication devices **16**, **18**, and **19** register with the particular base station or access point **14** to receive services from the communication system **10**.

Typically, base stations are used for cellular telephone systems and like-type systems, while access points are used for in-home or in-building wireless networks. Regardless of the particular type of communication system, each wireless communication device includes a built-in radio and/or is coupled to a radio. For packet or data transmission, cellular communication systems provide packet-based communication and interaction with data networks in accordance with applicable standards specifications (for example, 3GPP2, 1xRTT, et cetera.).

The communication devices serve as a user terminal, and are communicatively coupled to the item data management server **24** via the data network **22**. The item data management server **24** provides the capturing, storing, organizing and presenting of information regarding a plurality of physical items in the control of a user. The details of the item data management server **24** will be described in greater detail with reference to FIGS. **2** through **28**.

The data network **22** may be a single data network, a plurality of data networks that are coupled to communicatively couple a user terminal to the item data management server **24**. The data network **22** may be the Internet, a X.25 network, or private networks such as a local area network (LAN) or a combination thereof.

Other servers of the communications system **10** are accessible by the item data management server **24** in support of the functionality or services of the item data management server **24**. For example, the network system **10** includes an ecommerce server **26**, and valuation servers **32**. The valuation servers **32** include an auction server **34**, and appraisal service server **36**, and a merchant server **38**. As one of ordinary skill in the art may appreciate, the server functions, whether pertaining to an item data management server **24**, an ecommerce server **26**, or the valuation servers **32**, may be carried out through individual servers and/or a combination of servers coupled across a network (such as a local area network, a wireless local area network, a wide area network, et cetera), and that the servers may be shown as single function devices for the purpose of an illustrative example.

The ecommerce server **26** facilitates commercial transactions over the data network **22**. An ecommerce service provider enables and services secure communications (such as via a secure socket layer (SSL)), provides credit card processing functionality, provides inventory functionality, provides sale facilitation between two parties (for example, as through an auction transaction), et cetera. In operation, when a user engages in a transaction via the item data management sever **24**, the ecommerce server **26** receives a transaction **28**, processes the transaction and returns a transaction report **30**.

The valuation servers **32** provide information and data for the item data management server **24** for valuation estimates and/or appraisals of physical items in the control of a user, as reflected through physical item data records stored on the item data management server **24**. The item data management server **24** accesses the valuation servers, such as a merchant server **38** and/or an auction server **34**, to retrieve data relating to auction values and commercial sale values of the physical item. With these values, the item data management server **24** can generate a valuation estimate through a sum average valuation or other suitable valuation method. Paid appraisal services are also accessible via an appraisal service server **36**, which provide appraisal-value documentation, with electronic certificates, for an item based upon the attributes for a physical item.

In operation, the item data management server **24** engages in a plurality of searches and server accesses to arrive at a sum-average or best-fit average valuation. For example, item data management server **24** may determine the valuation of the physical item, or items, by accessing various on-line sites including, such as auction sites, various reference book and/or magazine sites to retrieve data for making a valuation. For example, if the item is an automobile, the item data management server **24** may survey sites such as Kelly's Blue Book (bbk.com), Edmunds.com, Autobytel.com, Cars.com and/or CarFax.com and solicit valuations based on the physical item attributes (such as vehicle identification number, mileage, accessories, make, model, year, repair history, et cetera). When multiple valuation references are returned to the item

data management server **24**, the sum-average valuation or valuation may also be based on a normal, or Gaussian, distribution curve.

Furthermore, general research can be conducted over the network **22** through the item data management server **24** based upon the attributes responses stored for each of the physical items of the database. This has the advantage of having the information readily available for subsequent research, with the attributes for each of the physical items to more particularly achieve specific results pertaining to a physical item.

FIG. **2** is a block diagram that provides a system level overview of the item data management server **24**. The item data management server can be a self contained unit containing the functionality to capture, store, organize and present information regarding a plurality of physical items in the control of a user, or embodied as a distributed system the includes multiple application-specific servers and network components.

The item data management server **24** includes processing circuitry **52** and memory **54** that stores operational instructions that cause the processing circuitry **52** to carry out the methods and/or processes of the present invention. The processing circuitry **52** operates pursuant to an operating system such as IBM OS/2, Linux, UNIX, Microsoft Windows, Apple OS X, SUN OS, and other commercially available operating systems that provides functionality for the services provided by the present invention. The operating system or systems may reside at a central location or operate as a distributed resource.

The memory **54** stores software programs or modules that cause the processing circuitry **52** to perform tasks such as, but not limited to, facilitating client requests, system maintenance, security, data storage, data backup, data mining and document/report generation. The provided functionality may be embodied directly in hardware, in a software module executed by a processor or in any combination of thereof. Further, software operations may be executed, in part or wholly, by one or more servers or a client's system, via hardware, software module or any combination thereof.

The memory **54** may be provided as RAM memory, flash memory, ROM memory, EPROM memory, EEPROM memory, registers, hard disk, a removable disk, a CD-ROM, DVD, optical disk, or any other form of suitable storage medium. The memory may be a self-standing device or units coupled to the processor such that the processor can read information from, and write information to, the memory. In the alternative, the memory may be integral to the processor.

The item management server **24** includes a network interface **58**, an exchange server **60**, a File Transfer Protocol server **62**, a file server **64**, an advertisement server **66**, an application server **68**, a subscription server **70**, a web server **72**, a forum (message board and blog) server **71**, a transaction processing server **73**, a database server **74**, a backup server **75**, a database **78**, and a database backup storage **80**. Each of the servers or databases may be duplicated or mirrored to provide system redundancy and promote maintenance and the integrity of the data by being hot swappable. Also, the servers as shown provide individual functions; however, multiple server functions may be consolidated onto a single server platform that include sufficient processing and storage resources, a single server function may be provided on a distributed server platform that includes sufficient processing and storage resources. The processing circuitry is in communication with these components via a bus **56**. In the instance of a distributed system, a local area network provides the bus **56**.

The network interface **58** supports data transmission with the data network **22**. The exchange server **60** provides messaging services such as an email client and groupware applications (for example, shared calendars). The applications of the exchange server **60** may be accessed via a POP3 (Post Office Protocol) and IMAP4 (Internet Messaging Access Protocol) through clients such as Mozilla Thunderbird and Lotus Notes for email access to email clients, such as subscribers to the item data management server **24**. In operation, the exchange server **60** provides customer interaction and customer relationship management functions with users of the item data management server **24**.

The FTP (File Transfer Protocol) server **62**, and file server **64** provide document access functionality. The FTP server **62** and file server **64** stores files (such as documents, images, media) and makes them available over the data network **22** and the ability to transfer files between two internet sites. The subscription server **70** provides online registration and subscription management service for physical item capture, storage, organization, and information presentation.

The application server **68** delivers content over the data network **22** by interpreting web site traffic and constructing web pages based on a dynamic content repository, such as that provided via a physical item data record relating to the physical item in the control of a user. The content is personalized based on site visitor information, such as the content viewed, the content of the physical item data record, past transaction history, or user defined preferences.

The advertisement server **66** stores, retrieves, and manages advertisements for presentation to a user in the control of a physical item. In operation, the advertisement server **66** manages advertisement services for third-party advertisers affiliated with the item data management server **24**, manages locally generated advertisements, and generates statistics regarding advertisement effectiveness (such as access clicks by users, page access, et cetera). Further, the advertisement server **66** can deliver advertisements based upon attributes of the physical items in the control of the user, as well as based upon user attributes such as keyword, IP address, domain, weekday, hour of day, language, browser, operating system, et cetera.

The transaction processing server **73** processes financial transactions (such as credit card transactions, banking transactions, PayPal transactions, bartering transactions, et cetera) of the user with other subscribers or third-party entities relating to a physical item in the control of the user. In operation, when the user is entering into a transaction, they are linked to a secure payment information query (where the customer is given visual clues of the Secure Socket Layer (SSL) encryption for the form).

When the user submits payment information, the transaction processing server **73** processes the transaction and gives the user immediate transaction status—approval, decline or other status indication. Further, if the transaction processing server **73** approves the transaction, the exchange server **60** sends an e-mail message containing the user's contact information (such as the mailing information) and an transaction summary both to the user and the other party, which may another subscriber to the item data management server **24** or a merchant. The transaction processing server **73** may provide other services, such as mailing labels, when the user has conveyed a physical item in their control to another party.

The forum server **71** provides message board and blog services to the users of the item data management server **24**. Examples of the services may be frequently asked question (FAQ) management for the user community, and to support communities created by the users to allow the sharing infor-

mation either openly or in a moderated manner, such as though a message board or blog (that is, a web log).

The web server **72** stores HyperText Markup Language ("HTML") or EXtensible Markup ("XML") documents that can be retrieved via a Web browser at the user terminal.

The database server **74** executes database software for access to data stored in the database **78** that enables a user and/or a database administrator to enter, organize, and select data in a database. The backup server **75** and database backup storage **80** provides data redundancy and backup services to physical item data records. Examples of a database management system ("DBMS") software, or database client programs, are Microsoft Access, MySQL, et cetera. Databases are organized by fields, records and files. A field is a single piece of information; a record is one complete set of fields; and a file is a collection of records. An alternative concept in database design is known as Hypertext. In a Hypertext database, any object, whether it be a piece of text, a picture or a film/video, can be linked to other objects and is useful for organizing large amounts of disparate information.

The database on the database server **78** and/or the backup server **75** may be of a hierarchical, relational or distributed database structure. In a distributed database structure, two or more data files are located at different computers coupled across a computer network. Because the database is distributed, different users can access the database contents without interfering with one another. A DBMS, however, periodically synchronizes the scattered databases to make sure that all users have consistent data.

FIG. **3** is a block diagram of a system level operation illustrating a functional or client level operation of the user terminal **76** with the item data management server **24** across a data network **22**.

The user terminal **76** (personal computer) includes a browser client **82** having a graphic user interface ("GUI") **84** and a browser engine **90** that may be an Asynchronous JavaScript and XML ("AJAX") engine, a HyperText Transfer Protocol ("HTTP") engine, et cetera. The browser client **82** may be a provided by a browser application such as Netscape, Firefox, Opera, Safari and/or Internet Explorer. For secure transmission, the selected browser client employs SSL protocol or other such secure transmission protocol.

The item data management server **24** includes a HyperText Transfer Protocol/eXtensible Markup Language (HTTP/XML) interface module **96**, a command engine **98**, and database system components **74** and **78**. In general, the browser client **82** accesses the item data management server **24**, which stores or creates resources such as HyperText Markup Language ("HTML") files and images. Between the user terminal **76** and the item data management server **24** is the data network **22**, which as noted earlier, may include several intermediaries, such as proxies, gateways, tunnels, et cetera.

The user terminal **76** receives input and provides output via input/output **77** to the browser client **82** through the graphic user interface ("GUI") **84**. The browser engine **90** receives a web page request **86** from the GUI **84**. An AJAX engine implements a process for using a number of existing technologies together, including the following: HTML or XHTML, Cascading Style Sheets, JavaScript, the Document Object Model, XML, XSLT, and the XMLHttpRequest object for incrementally updating the web page presented and displayed through the GUI **84**. The AJAX engine operates to increase web page "responsiveness" by exchanging small amounts of data with the item data management server **24** behind the scenes, so that an entire web page does not have to be reloaded each time the user makes a change, as well as increase interactivity, speed, and usability of a web page.

The browser engine **90** sends a HTTP request **92** to the item data management server **24**, where HTTP is a request/response protocol used for providing a convey the request across the data network **22**. The browser engine **90** uses the HTTP for transmitting HyperText Markup Language (HTML) pages across data networks (such as the Internet). HTTP is a request/response protocol for transmitting HyperText Markup Language ("HTML") web pages across data networks **22**, such as the Internet, between browser clients and servers. HTTP is defined under IETF Request for Comment ("RFC") **2616**.

The Web/XML interface module **96** receives the HTTP request **102** and processes therefrom the data item record request **102**. The data item record request **102** is based upon the input of the user via the user terminal **76**. Examples of a data item record request include a query to the item data management server **24**, a query response, data input regarding a physical item, a command for additional information, et cetera.

The command engine **98** receives the data item record request **102**, and with the data item record command **104**, accesses the database systems **100** and retrieves response data **108**. The command engine **98** provides a response command to the Web/XML interface module **96**. The Web/XML interface module sends a web page response **94**. The browser engine **90**, processes the web page response **94**, and presents a web page **88** to the GUI **84** for interaction with a user via the user terminal **76**.

FIG. **4** is a block diagram depicting the interaction between user terminal **76** and the item data management server **24** to capture, store, organize, and present information regarding a plurality of physical items in the control of a user.

Through the user terminal **76**, a user registers and pays a service fee through the subscription server **70** (see FIG. **2**) for the service features available from the data item management sever **24**. In the setup process, the subscription server **70** queries the user through the GUI **84** via software applications designed to illicit user information via the user terminal. The transactions and data transfer between the client and server takes place via a secured communications link.

With an account established, a user populates the database **78** with physical items in the control of the user, including images, physical item descriptions, physical item valuation information, condition or quality descriptions of the physical item, et cetera. In response to the user inputs, the item data management server **24** compiles a physical item data record **240** for each of the physical items in the control of the user in the database **78**. Also through the subscription with the item data management server, the user is provided with access to the combined non-private portions of the physical items controlled by other users. The graphic user interfaces for entering information regarding a physical item and the physical item data record structure created by an item data management server are described in detail with reference to FIGS. **5** through **7**.

In operation, the item data management server **24** presents an item identification query **152** to the user terminal **76**. The item data management server **24** receives, in response to the item identification query, an item identification response **154** from the user terminal **76** that corresponds to and identifies a physical item controlled by the user. The item identification response **154** may include a simple object identifier of the physical item or a more detailed identifier. For example, when the physical item is a stamp, the item identification response **154** may simply be "collectible stamp," or as a more descriptive example, the item identification response **154** may be "1978 Fifty Cent Panda Commemorative Stamp." To preserve

associated database capacity, the item identification response may be limited to a predetermined character length.

Based upon the item identification response **154**, the item data management server **24** creates a physical item data record **240** corresponding to the physical item in the control of the user. Further, based upon the user subscription, the item data management server **24** alters the physical item data record **240** to indicate that the user is the creator of the physical item data record **240**.

The item data management server **24** presents an item categorization query **156** to the user terminal **76**, and receives, in response to the item categorization query **156**, an item categorization response **158** from the user terminal **76** that identifies a category for association with the physical item in the control of the user. For simplicity, the item data management server **24** may provide a predetermined list of categories, as well as accepting a category submission generated by the user. An example of a predetermined list of categories is "Antiques, Art, Books, Comic Books, Coins, Jewelry, Sports Memorabilia, Stamps, Video Games," et cetera. Based upon the categorization response **158**, the item data management server **24** alters the physical item data record **240** to include the category.

The item data management server **24** presents at least one selectable item attribute query **160** to the user terminal **76**, the selectable item attribute query **160** is based upon the category included with the physical item data record **240**. That is, the attributes stored in the physical item data record for a physical item provide as complete a description as possible for the physical item, making refined, specific Internet searches possible, reducing the time and effort for a user to update their knowledge of their physical items with respect to uniqueness, rarity, valuation, et cetera. Without such a structure, the search on an item-by-item basis would readily become tedious and overly time consuming. Further, the attributes stored in the physical item data record for a physical item also facilitate trading, barter, and community communication activities (such as a message board or a blog) related to the physical item.

As an example, if the category provided with the item categorization response **158** is "stamps," at least one attribute query is "stamp year." Other examples of attributes based upon the "stamp" category are those associated with acquisition of the stamp by the user, the valuation of the stamp, and the stamp characteristics. Examples of the attributes with respect to a category will be described in detail with respect to FIG. **7** in the context of a physical item data record **240**.

The item data management server **24** receives, in response to the at least one selectable item attribute query **160**, at least one item attribute response **162** from the user terminal **76** that identifies an attribute of the physical item in the control of the user. Based upon the at least one item attribute response **162**, the item data management server **24** alters the physical item data record **240** to include the attribute included in the at least one item attribute response **162**.

The item data management server **24** presents a file upload query **164** to the user terminal **76**, and receives, in response to the file upload query **164**, a data file **166**. The item data management server **24** associates the data file with the physical item data record **240**. The data file **166** may be an image file, a document file, and/or a media file that includes video data, voice data, audio data, image data, text data, or a combination thereof. The data file may also be provided as a link to the data file, where the link may be to a local document to the user terminal **76**, or at another Internet Protocol address or other computer identifier, in which the item data management server **24** accesses and uploads the document using the document link. Also, documents, images, and media can be digitally signed (item ID plus account public identity) when uploaded.

With the populated physical item data record **240**, the item data management server **24** creates a web page **168** that includes information from the physical item data record **240**, an advertisement link based upon the physical item data record, and at least one other link selected based upon the physical item data record. The item data management server **24** presents the web page **168** to the user terminal **76**. The details of the web page **168** are discussed with reference to FIG. **8**.

FIG. **5** is an illustration of an add physical item GUI **200** provided to the user for input and output through the user terminal **76**. The item data management server **24** presents queries through the add physical item GUI **200** to the user terminal **76**, and is able to receive responses to the queries and alter the physical item data record.

The add physical item GUI **200** includes a navigation bar **202**, an add new physical item query field **204**, a file upload query **164**—including an image file upload query **206**, a document file upload query **208**, and a media file upload query **210**, a link add query **212**, a tag query **214**, a physical item attribute query **216**, a collections query **218**, and item notes query **220**.

The navigation bar **202** includes search, collections, forums, experts, and contacts commands for navigating to other functions within the web site supported by the item data management server **24**. The add new physical item query field **204** includes an item identification query **152**, an item categorization query **156**, and a valuation query **226**.

The item data management server **24** presents these queries for each of the plurality of physical items in the control of the user, and receives responses to these queries that are then used to create and alter physical item data records **240**.

The file upload query **164**, which includes the image file upload query **206**, the document file upload query **208**, and media file upload query **210** include fields for accepting file names with suitable file formats, as indicated by the file extensions, for the respective query. That is, for an image file, examples of suitable file formats for web page creation include jpg (Joint Photographic Experts Group), gif (Graphic Interchange Format), png (portable network graphics), tiff (Tagged Image File Format), et cetera. For a document file, examples of suitable file formats include pdf (Portable Document Format), xls (Excel), doc (Word format), et cetera. For a media file, examples of suitable file formats include wav (WAVeform audio), wmv (Windows Media Video), mov (Quicktime movie format), mp3 (MPEG Layer 3), et cetera.

The file names may be located using a directory browse feature to access the directory structure of the user terminal **76**, or a distributed device associated with the user terminal **76**. The filename and directory path are entered into the filename fields, and upon pressing the "upload" command, the item data management server **24** receives and associated data file **166**, upon pressing the "upload" command within the respective queries.

The add link query **212** includes a file name or universal resource link ("URL") designation that may be received by the item data management server **24**, which adds the hyperlink to the physical item data record **240**, but not the linked object.

A lockbox option is provided with the file upload query **164** that includes the image file upload query **206**, the document file upload query **208**, and the media file upload query **210**, and with the link add query **212**. The lockbox option causes the associated data file or link to be invisible to other users

when the item is added to a collection that otherwise provides viewing and/or altering permissions to other users.

The tag query **214** receives tags, or keywords, from the user that the item data management server **24** associates with the physical item in the control of the user. The tag query **214** provides tags under a "your tags" basis or under a "collection tags" basis.

The item data management server **24** presents selectable item attribute query **160** to the user terminal **76**. The selectable item attribute query **160** is based upon the category selected in the item categorization query **156**. That is, the item data management server **24** provides a list of applicable attributes under the category. The user does not require pre-existing attributes associated with a category. Further, an information link can be associated with the attribute to provide information to the user when selected. In this manner, when information is sought regarding the physical item, the user does not need to research and formulate the attributes to retrieve suitable information from an Internet search engine—the item data management server **24** has created a database to efficiently retrieve pertinent information, including research materials, background, advertising solicitations, et cetera.

The number of fields available in the selectable item attribute query **160** varies according to the category selected in the item categorization query **156**. For example, when the category is "stamps," the selectable item attributes presented in place of the "field" labels may be "Scott #," "Nationality," "Year," "Issue," "Denomination," "Grade," "Issue," "Grade," et cetera. The attributes are selected when the user places text in response to the attribute query.

The item data management server **24** presents a collections query **218**, and receives in response a collections query response. The collections query response reflects the collections to which the physical item belongs. Generally, small businesses, groups, and individuals frequently have large collections of physical items, and maintenance and care of the collection require inventories and activity recording pertaining to individual physical items of the collection.

The item data management server **24** alters the physical item data record **240** to include an association with the selected collection reference data structures for the physical item. That is, when a physical item is included in a collection, the physical item data record **240** is updated to reflect the collection set in which it belongs. Collections are discussed in detail with respect to FIGS. **9** through **14**.

The item data management server **24** also presents a notes query **220**, in which the user may respond by placing text notes in the area provided. This query permits the user to provide idiosyncratic information regarding the physical item that may not be otherwise addressed through the item categorization query **156** and the selectable item attribute query **160** based upon the category.

When the user has entered or provided responses to the queries of the add physical item GUI **200**, the user may respond by pressing the "ADD" command **227**. In the alternative, the user may not respond by pressing the "CANCEL" command **229**.

The "ADD" command transmits, and the item data management server **24** receives, the responses from the respective query fields. With this information, the item data management server **24** creates a physical item data record **240** in response to the item identification query, alters the physical item data record **240** to indicate that the user is the creator of the physical item data record, and alters the appropriate fields of the physical item data record **240** with the responses provided by the user.

FIG. **6** is an illustration of a rapid item import GUI **230** that the item data management server **24** may provide to a user for input and output through the user terminal **76**. The rapid item import GUI **230** provides a rapid entry generation query **702**, which takes advantage of user database or list files having a dissimilar application file formats to that of the database **78**, yet contain a plurality of physical items in the control of the user. When receiving a multiple item query response, the item data management server **24** uses a conversion utility to convert data from other file formats (such as Excel, TurboTax, Quickbooks, Quicken, et cetera) to populate a plurality of physical item data records of the database **78**. Also, the item data management server **24**, via the rapid item import GUI **230**, accepts images, video, audio, and/or document files to create a physical item data record in the server database **78**.

The rapid entry generation query **702** includes filename fields to receive file names that may be directly entered or may be located using a directory browse feature to access the directory structure of the user terminal **76**, or a distributed device associated with the user terminal **76**. The filename and directory path are entered into the filename fields, and upon pressing the upload and create items command **234**, the item data management server **24** receives and creates physical item data records **240** for the physical items identified from the uploaded files.

The rapid item import may also be provided via a graphic image file, in which multiple items are represented. The item data management server **24** provides a utility application that automatically parses the individual physical items from the file. The parsed images can then be selected by the user for inclusion in the database **78** of the item data management server **24** as physical item data records through the add physical item GUI **200**. Rapid item data entry is discussed in further detail with reference to FIGS. **21** through **28**.

FIG. **7** is an illustration of a physical item data record **240** according to an embodiment of the invention. The item data management server **24** stores, alters, and organizes the physical item data record **240** in a database **78**. As noted earlier, the item data management server **24** alters the physical item data record with received query responses from the user terminal **76**. Further, for new database entries regarding physical items in the control of a user, the item data management server **24** creates a physical item data record for that physical item.

The physical item data record **240** is not a static database structure, but may change as activity occurs with respect to physical item in the control of a user. Examples of change include the addition of information, or information updates (that may result from commercial transactions involving the physical items), valuation activity, appraisal activity, et cetera.

The physical item data record **240** includes a key **224**, a category **226**, attributes **216**, tags **214**, item identification **222**, notes **220**, and data files **166**. The attributes **216** include acquisition attributes **228**, valuation attributes **236**, and characteristic attributes **238**. The key **224** has a creator field and an item ID field. With the login or registration of the user, the item data management server **24** alters the physical item data record **240** to indicate that the user is the creator. The item ID is generated by the database server application. The category field **226** is contains result of the categorization response **158**. The attributes **216** are based upon the result of the categorization response **158**, physical item data record conforms to the attributes. That is, the attributes change based upon the category received in the categorization response **158**.

FIG. **8** is an illustration of a web page **168** created by the item data management server **24** according to an embodiment of the invention. The web page **168** formats and presents

information from the physical item data record **240**, an advertisement link **242** based upon the physical item data record, and at least one other link **244** based upon the physical item data record.

The web page **168** includes a navigation bar **202**, an item identification **222**, a category **224**, and a valuation **226**. The information from the physical item data record **240** is shown in an image field **206**, a document field **208**, a media filed **210**, a link field **212**, a tag field **214**, attributes fields **216**, a collection field **218** and notes field **220**. The web page **168** may also include the status identifier field **246**, which identifies whether the item is public, and the owner of the physical item.

The advertisement link **242** is based upon the physical item data record **240** with respect to an attribute and/or category associated with the physical item. That is, as the item data management server **24** alters the physical item data record **240** based upon query responses, the advertisement link **242** changes. For example, as the value or appraised valuation of a physical item increases, the advertisement link **242** may provide sales and/or commercial transaction links to an online auction house. The other link **244** may be an additional advertisement link, or may be a resource link relating to additional information or background relating to the physical item identified in the physical item data record with respect to at least one attribute and/or category associated with the physical item. Further, the advertising link **242** and the other link **244** may be transitioning links. That is, the item data management server **24** changes the links upon a web page refresh initiated by the user, by the browser client **82** (based upon a refresh timer), or as the item data management server **24** may push to the user terminal **76** on a periodic basis.

That is, the item data management server **24** provides targeted advertising (such as banner ads targeted to a specific item attribute and/or category) as well as affiliate modules for linking hypertext data directly into the web page **168** (that is, book collections directly into a bookstore online search engine). The advertising link **242** may also be provided as contextual searching, and the item data management server **24** may incorporate such a feature through third party vendor applications and/or services such as Google Adsense. Following enrollment, the Adsense application enables the item data management server **24** to provide text and image advertisements in the created web pages presented to the user terminal. The Google search generates advertisement links based on website content (that is, the physical item data records), the user's geographical location, and other factors.

FIG. **9** is an illustration of a collection summary web page **280** created by the item data management server **24** according to an embodiment of the present invention. The collection summary web page **280** summarizes the collections relating to the user.

The collection summary web page **280** includes a navigation bar **202**, a collection identifier field **282**, a collection owner field **284**, a collection type/community field **286**, a collection valuation field **288**, an items field **290**, and an edit/add collection query **292**.

The collection identifier **282** is a unique identifier to permit an assembly or inclusion of physical item data records under a specific collection. As indicated in the collection owner field **284**, the collection may be specific to the user, or may be a collection created by another user of the item data management server **24** in which the present user has been granted permission to view and/or alter the physical item data record. The collection type/community field **286** specifies whether the collection is private or shared. When private, the collection is only accessible by the user. When shared, the collection may be accessed by other users of the item data management server **24**. Further when shared, and the collection belongs to the user (that is, "[me]"), the user may designate the access permissions by other users to the collection. Generation of a community of users is discussed in detail with respect to FIGS. **11** through **13**.

The collection valuation field **288** reflects the valuation total for a respective collection as a whole (as distinguished by the value of its individual items). By setting up different collections, a user may be able to determine which combinations of physical item data records have a greater value than others. The items field indicates the number of physical item data records that are associated with a collection. The collection, when shared, permits other users to add their physical item data records to the collection, forming virtual sets that can be valuated and appraised. The significance being that the valuation of a collection may be greater than the valuation of the individual physical items that make up the collection. These information aids the user in decisions to enter into commercial transactions to buy or sell items relating to a given collection.

The collection summary web page **280** also includes a create collection query **268**, which the item data management server **24** presents to the user terminal **76**. When create collection query **292** is pressed, the item data management server **24** receives a collection creation response from the user terminal **76**. Collection population, community generation/creation, and collection views are discussed in detail with reference to FIGS. **10** through **14**.

FIG. **10** is an illustration of an item view web page **320** that the item data management server **24** presents to the user through the user terminal **76** according to an embodiment of the invention. The item view web page **320** presents, in summary fashion, an item list **330** having underlying physical item data records for the physical items in the control of the user which have been created and/or modified by the item data management server **24**. The item view web page **320** provides information for a physical item that includes include the "item name," the "category" and "type" assigned to the physical item, the "origin" regarding the geographic origin of the physical item (country and/or region), and a "valuation" for the physical item.

The item view web page **320** also presents queries to a user terminal **76** including an action query **324** and a collection query **326**. For an action query **324** or a collection query **326** to act with respect to a physical item, the item is selected from the item list **330**. An item is selected by a user clicking on a selection box to place a "check" icon, thus selecting the item. In this manner, a plurality of physical item data records **240** may be associated with a collection reference data record through the collection query **326**.

The collection query **326** also presents to a user terminal **76** a list of selectable user created collections (such as those named collection Z, A, B, et cetera) for associating the physical item record with a collection. The user may have created one or all of the collections, while others may have been created by other subscribers to the item data management server **24**. The collection query **326** also presents the user with an opportunity to select "create collection" to create additional collections when the list does not provide one suitable to the user. Creation of an edit/create collection GUI is discussed in detail with reference to FIG. **11**.

The action query **324** presents to user terminal **76** a list of multiple possible actions to a selected item (or items) in the item list **330**. For example, the action query **324** allows the user to provide a response of "View Selected," (in which the

item data management server **24** creates a web page **168**), "Remove from Collection," "Batch Edit Tags," and/or "Delete Items."

The activity bar **322** provides action commands to a user for activities for the physical items. Examples of activities are research an item (such as for colors, construction, rarity, et cetera), sell or buy a physical item, initiate or respond to trade inquiries with other users, engage in forum discussions regarding an item, seek merchandising information for an item, generate reports on the physical item data records for the physical items, et cetera.

FIG. **11** is an illustration of an edit/create collection GUI **360** according to an embodiment of the invention. The edit/create collection GUI **360** includes a navigation bar **202**, a collection creation query **362**, a community creation query **366**, a permissions query **368**, a subscriber query **370**, a subscriber action query **372**, a community list **374**, an "ADD" query **376**, a "CANCEL" query **378**, and a "DELETE" query **379**.

The item data management server **24** presents the edit/create collection GUI **360** when a user selects "create collection" from the item view web page **320** (see FIG. **10**), the "create collection query **292**" from the collection summary web page **280** (see FIG. **9**), "add to a collection" from the collections field **218** (see FIG. **8**), et cetera. Depending on the permissions provided through an associated community of users, a user may edit a collection created by another user.

Through the edit/create collection GUI **360**, the item data management server **24** presents a collection creation query **362** to the user terminal **76**. The user, through the user terminal **76**, responds with a collection query response in the provided field. When the user does not elect to share the collection by leaving the share query **364** unselected, the item data management server **24** receives the collection query response when the user presses the "ADD" command **376**.

When the user elects to share a collection, the user "checks" the share query **364**. When the share query **364** is checked, the item data management server **24** presents a community creation query **366** via the edit/create collection GUI **360**. The user enters a community creation response, such as a community name, to the community creation query **366**. The subscriber query **370** allows the user to associate a plurality of subscribers with the community creation query **366**. Through the subscriber action query **372**, the user may add additional subscriber identifiers to the subscriber query **370**, or delete subscribers from the subscriber query **370**, when checked, by selecting the delete command.

Associated with the subscriber query **370** is the permissions query **368**. The user selects permissions to the subscribers of the subscriber query **370** to specify access rights to specific users and/or groups of users associated with a community. In other words, permissions allow a user to control the ability of others to view or make changes to the contents of a collection within the control of the user. In this manner, a first group of subscribers to be associated with the community reference data structure have both a right to review and a right to alter a physical data item data record contents of the collection data structure by adding records or deleting records from the collection data structure, and a second group of subscribers of the plurality of subscribers associated with the community reference data structure have the right to review but not the right to alter the physical item data record contents of the collection data structure.

Also, when a user specifies access rights to their collection, an invitation query may also be generated and provided to the specified users and/or groups of users. Responses to the invitation query then confirm whether or not the other users will participate in the shared collection.

The edit/create collection GUI **360** allows other communities of a plurality of communities **374** to be associated with the collection being created under the collection creation query **362**. Further, the user is able to edit existing communities where the user is the creator. The user may change the subscriber affiliations for communities when users are added to the item data management server **24**. Notably, also, the item data management server **24** may update the subscriber list for a community when items are conveyed or are sold to other users, allowing a user to maintain a collection while the user control information is updated through an underlying physical item data record **240**.

When the user presses the ADD command **376**, the item data management server **24** receives the responses that the user enters to the queries. In this manner, the item data management server **24** presents the collection creation query **362** to the user terminal **76**, and receives, in response to the collection creation query, a collection creation response from the user terminal **76**. The item data management server **24**, based upon the collection creation response, creates a collection reference data structure, which is discussed in detail with reference to FIG. **12**. In the alternative, the user may press the CANCEL command **378** to exit without sending a response to the queries being sent to the user terminal **76**. Further, the user may delete the collection by pressing the DELETE collection command **379**.

FIG. **12** is an illustration of a collection reference data structure **400** in accordance with an embodiment of the invention. The collection reference data structure **400** includes a collection identifier **402**, privacy flag **404**, an associated community (or communities) **406**, subscriber fields **408**, and associated physical item data records **410**.

The collection identifier **402** designates an identifier for the collection reference data structure **400**. The privacy flag **404** indicates whether the collection is private to the creating user or public in nature, either to all subscribers to the item data management server **24**, or to a specified group of users. When the privacy flag **404** indicates that the collection is private to the creating user, then the item data management server **24** would not access the community reference data structure relating to the associated community field **406**.

When the privacy flag **404** is not set, or indicates that the collection is not private, then the item data management server **24** accesses the community reference data structure **420** related to the associated community field **406**. The community reference data structure **420** is discussed in detail with reference to FIG. **14**.

The physical item data records **410** are associated with the collection reference data structure **400**. The item data management server **24** associates the physical item data records with the collection reference data structure **400**, and alters the physical item data record (see FIG. **7**) for the item to include an association with the collection reference data structure **400**. The associated physical item data records **410** are associated through links or pointers to the physical item data records **240**, such as indicated by item IDs (such as item ID **12** for the "Panda Stamp," and item ID **25** for the "Beaver Stamp") **25**. In the example provided, collection Z is associated with the physical item data records **240** for the "Panda Stamp" and for the "Beaver Stamp." Based upon the collection reference data structure **400**, the item data management server **24** creates a collection web page **440**, which is discussed in detail with reference to FIG. **14**.

FIG. **13** is an illustration of a community reference data structure **420** according to an embodiment of the invention.

The community reference data structure **420** includes a community identifier **422**, a creator identifier **423**, and subscriber fields **424**. The subscriber fields **424** include subscriber identification fields **426**, subscriber name fields **428**, and permission fields **430**.

The community reference data structure **420** results from the community creation query presented to the user terminal **76** via the community creation query **366** of the edit/create collection GUI **360** (see **11**). The item data management server **24** receives, in response to the community creation query, a community creation response from the user terminal **76**, and based upon the community creation response, creates a community reference data structure **420**.

The creator identifier **423** identifies the creator belonging to the community. In this example, the creator is "joecollector3." The default permissions that the creator possesses are full permissions to review and alter physical item data records. The item data management server **24** associates a plurality of subscribers with the community reference data structure in the subscriber fields **424**. Each field of the subscriber fields includes the subscribe identification fields **426** to provide a subscriber "key" for the database **78**, the subscriber name field **428** stores the user names or "on-line" identity of the subscriber, and the permission fields **430** store the permissions the creator provides to each of the subscribers through the edit/create collection GUI **360** to alter the physical item data record contents of the collection reference data structure **400** (that is, whether they have a right to add physical item data records to, or delete physical item data records from, the collection reference data structure). In the example of FIG. **13**, a first group of subscribers have both a right to review and a right to alter physical item data record contents of the collection data structure **400**, and a second group of subscribers have the right to review but not the right to alter (as indicated by the "strike through" marks) the physical item data record contents of the collection reference data structure **400**.

FIG. **14** is an illustration of a collection web page **440** according to an embodiment of the invention. The collection web page includes a listing of the plurality of physical item data records **448-452** associated with the collection reference data structure **400**, and an advertisement link **444** and an other link **446**, each of which may be related to the category designation of the physical item data records or attributes of the physical item data record for the physical items.

The collection web page **440** also presents queries to a user terminal **76** including an action query **324** and a collection query **326**. For an action query **324** or a collection query **326** to act with respect to one (or several) of the physical item data records, the item is selected by a user clicking on a selection box to "check" to select the item.

The action query **324** presents to the user terminal **76** a list of multiple possible actions to a selected item (or items) in the item list **330**. For example, the action query **324** allows the user to provide a response of "View Selected," "Remove from Collection," "Batch Edit Tags," and/or "Delete Items." The collection query **326** presents to the user terminal **76** a list of categories for moving a selected item to another collection, or to add the item to another collection, as well as creating another collection based upon the selected physical item data records.

The collection valuation field **442** may be a value greater than the individual pieces of the collection that is reflected in the valuation total field **454**. That is, a complete set may have the greatest value, and by providing the collection to a community, additional valuations potentials are available. The collection, when shared, permits other users to add their physical item data records to the collection, forming virtual sets that can be valuated and appraised. The significance being that the valuation of a collection may be greater than the valuation of the individual physical items that make up the collection. These information aids the user in decisions to enter into commercial transactions to buy or sell items relating to a given collection.

The advertisement link **444** is based upon the collection reference data structure **400** and the associated plurality of physical item data records **240**. The advertisement link may be based upon the valuation total **454** for the collection, attributes of the plurality of items in the collection, and/or upon the category or categories associated with the physical items. That is, when the item data management server **24** alters the physical item data record **240** for a physical item, the advertisement link **242** may change to reflect the addition of newer information. For example, as the value or appraised valuation of a physical item increases, the advertisement link **444** provides sales or transaction links to an on-line auction house. The other link **446** may be an additional advertisement link, or may be a resource link relating to additional information or background relating to the physical item identified in the physical item data record with respect to at least one attribute and/or category associated with the physical item. Further, the advertising link **444** and the other link **446** may be transitioning links. That is, the item data management server **24** changes the links upon a web page refresh initiated by the user, by the browser client **82** (based upon a refresh timer), or as the item data management server **24** may push to the user terminal **76** on a periodic basis.

In response to selection by the user of the advertisement link **444** presented on the collection web page **440**, the item data management server **24** transmits a web page request to an ecommerce server, such as ecommerce server **26** (see FIG. **1**). The item data management server **24** services a transaction with the user via the user terminal **76** and the ecommerce server **26**, and receives a transaction report from the ecommerce server **26** reporting the transaction with the user via the user terminal **76** to the item data management server **24**.

FIG. **15** is an illustration of a category GUI **480** according to an embodiment of the invention. The category GUI **480** includes user defined categories **482**, a create category/attributes query **488**, and a defined global categories **492**. The user defined categories **482** each include a create attribute query **490**.

The category GUI **480** provides a plurality of global collection categories **490** that includes at least one category **496** with associated attributes. The associated attributes may be added and/or edited via the add/edit query **494** based upon responses to the query by a user.

The user defined categories **482** include attributes **484**, which the item data management server **24** may include as associated with the categories, and further may include user defined attributes **486**. The create attribute query **490** allows a user to add attributes to a user-defined category through query responses. Also, the create category/attribute query **488** allows a user to add additional categories and associated category attributes in addition to those that the item data management server **24** provides as default categories.

The category GUI **480** operates to facilitate the addition of categories, attributes and/or classes for customizing the Global Collection Categories available for categorizing the physical items in the control of the user. For example, a user defined category of "Eggcups" is added to the Global Collection Categories via the user defined categories **482**. The item data management server **24** associated attributes **484** with the user-defined category, such as a profile attribute, an origin

attribute for the "Eggcups" category. With respect to user defined attributes, a user may add additional attributes as desired through the create attribute query **490** for association with a given user defined category. For example, a user defined attribute of "Material" provides collection of this attribute.

FIGS. **16***a* and **16***b* are a flow diagram illustrating a method **500** in an item data management server to capture, store, organize, and present information regarding a plurality of physical items in the control of a user according to an embodiment of the invention.

Beginning at step **502**, the item data management server **24** presents an item identification query to the user terminal. The item data management server receives at step **504**, in response to the item identification query, an item identification response from the user terminal that corresponds to and identifies a physical item controlled by the user. Based upon the item identification response, the item data management server creates at step, **506** a physical item data record corresponding to the physical item in the control of the user, and alters the physical item data record to indicate that the user is the creator of the physical item data record at step **508**.

At step **510**, the item data management server presents an item categorization query to the user terminal, and receives, in response to the item categorization query, an item categorization response from the user terminal that identifies a category for association with the physical item in the control of the user at step **512**. Based upon the categorization response, the item data management server alters the physical item data record to include the category at step **514**.

At step **516**, the item data management server presents at least one selectable item attribute query to the user terminal. The at least one selectable item attribute query is based upon the category included with the physical item data record. The item data management server receives at step **518**, in response to the at least one selectable item attribute query, at least one item attribute response from the user terminal that identifies an attribute of the physical item in the control of the user. Based upon the at least one item attribute response, the item data management server alters the physical item data record to include the attribute included in the at least one item attribute response at step **520**.

At step **522**, the item data management server presents a file upload query to the user terminal and at step **524** receives, in response to the file upload query, a data file, which is associated with the physical item data record at step **526**.

At step **528**, the item data management server creates a web page that includes information from the physical item data record, an advertisement link based upon the physical item data record, and at least one other link selected based upon the physical item data record. At step **530**, the item data management server presents the web page to the user terminal.

FIG. **17** is a flow diagram illustrating a method **532** for further engaging an ecommerce server according to an embodiment of the invention.

In response to selection by the user of the advertisement link presented on the web page, the item data management server at step **534** transmits a web page request to an ecommerce server, such as ecommerce server **26** (see FIG. **1**). The item data management server services a transaction with the user via the user terminal and the ecommerce server at step **536**, and receives a transaction report from the ecommerce server at step **538** reporting the transaction with the user via the user terminal to the item data management server.

FIG. **18** is a flow diagram illustrating a method **540** for further engaging in collection web page creation according to an embodiment of the invention.

At step **542**, the item data management server presents a collection creation query to the user terminal, and receives at step **544**, in response to the collection creation query, a collection creation response from the user terminal. Based upon the collection creation response, the item data management server at step **546** creates a collection reference data structure, and associates a plurality of physical item data records with the collection reference data structure at step **548**. For each of the plurality of physical item data records associated with the collection reference data structure, altering the physical item data record to include an association with the collection reference data structure.

FIG. **19** is a flow diagram illustrating a method **552** for further creating a collection web page according to an embodiment of the invention.

At step **554**, the item data management server creates a collection web page that includes a listing of the plurality of physical item data records associated with the collection reference data structure. The item data management server, at step **556**, presents the collection web page to the user terminal, the collection web page including an advertisement link based upon the plurality of physical item data records associated with the collection reference data structure.

FIG. **20** is a flow diagram illustrating a method **558** for further creating a community reference data structure according to an embodiment of the invention.

At step **560**, the item data management server presents a community creation query to the user terminal, and receives at step **562**, in response to the community creation query, a community creation response from the user terminal. Based upon the community creation response, the item data management server at step **564** creates a community reference data structure. At steps **566** and **568**, the item data management server associates a plurality of subscribers and a collection data structure with the community reference data structure.

FIG. **21** is a signal flow diagram for creating a plurality of physical item data records with the item data management server **24** via a rapid item import GUI **230**. In general, the rapid item import GUI **230** facilitates rapid entry of physical items into the item data management server **24**.

The item data management server **24** presents a rapid entry generation query **702** to the user terminal **76**. The rapid entry generation query **702** includes data file queries **704**, **706**, **708**, and **710**. The rapid item import GUI **230** may include additional data file queries may be used to facilitate a larger number of data entries for physical items. The data file queries **704** through **710** receive file location responses from a user. The responses may be directly entered into the fields for the data file queries, or may be located using a directory browse feature to access the directory structure of the user terminal **76** or a distributed device associated with the user terminal **76**. The filename and directory path are entered into the data file queries **704** through **710**. Upon pressing the upload and create items command **234**, the item data management server **24** receives and creates physical item data records **240** for the physical items identified from the uploaded files.

Through the rapid entry generation query **702**, the rapid item import GUI **230** may receive locations of media files such as photo media files, digital recording files, text files, and/or multimedia files. For example, the data file query **704** includes a file location with photo media file extension ".jpg," the data file query **706** includes a file location with the digital recording file extension ".mp3," the data file query **708** includes a file location with the text file extension ".doc," and the data file query **710** includes a file location with the multimedia file extension "wmv." It should be noted that various

file formats may have a combination of media types. For example, a photo media file may include text regarding the time and date an image was created along with a brief text or audio description in addition to the photo image. File formats are discussed in detail with reference to FIG. **22**.

When the user presses the upload and create items command **234** in response to the rapid entry generation query **702**, the item data management server **24** receives a default category **710** and a set of default attributes **712** that correspond to all of the plurality of physical items in the control of the user. In this manner, the item data management server **24** provides a level of automation to the creation of physical item data records without a call for user input for each record. If the user desires, the category and set of attributes for a physical item may be later updated or modified as desired. The item data management server **24** also receives, in response to the rapid entry generation query **702**, a plurality of data files **714**, where each data file is respective to one of the plurality of physical items in the control of the user.

The item data management server **24**, at **716**, creates the plurality of physical item data records and alters each of the physical item data records to include the default category at **718**, and to include the set of default attributes at **720**. The item data management server **24**, at **722**, associates each of the plurality of data files with a corresponding physical item data record. Accordingly, the item data management server **24** creates a plurality of physical item data records based upon the plurality of data files identified by a user through the rapid item import GUI **230**.

FIG. **22** illustrates the plurality of data files **714** the item data management server **24** associates with the physical item data records. In this example, the item data management server **24** receives responses to the rapid entry generation query **702** relating to saws in the control of the user.

The plurality of data files **714** include a photo media file **732** with a digital image of a hacksaw, a digital recording file **734** with an audio description (such as the physical item's make, model, serial number, purchase price, et cetera) and/or audio recording of a chainsaw, a text file **736** that includes a written description of a hand saw, and a multimedia file **738** that includes multimedia entries (such as a digital image, audio, text, et cetera) for an antique saw. For purposes of discussion, the file types are indicated generally through icons (such as a camera for photo media, a speaker for digital recording media, a paper for text media, and a combination of various icons for multimedia). The specific file types are indicated with the filename extensions, such as, for photo media extensions including "jpg," "tiff," et cetera, for digital recording media extensions such as "mp3," "wav," et cetera, for text media extensions such as "doc," "txt," et cetera, and for multimedia extensions such as "wmv," et cetera. It should be noted that the files may also have some or all combinations of digital media including digital image, audio, and/or text. For example, the photo media file **732** may include text information such as time and date the image was created, as well as a brief description.

The item data management server **24** creates the physical item data records **240***a*, **240***b*, **240***c*, and **240***d*, and alters each of the plurality of physical item data records to include the default category **710** and set of default attributes **712**. The item data management server **24** associates each of the plurality of data files **714** with a corresponding physical item data record. For example, the item data management server **24** associates the photo media file **732** with the physical item data record **240***a*, the digital recording file **734** with the physical item data record **240***b*, the text file **736** with the physical item data record **240***c*, and the multimedia file **738** with the physical item data record **240***d*.

FIG. **23** is a flow diagram illustrating a method **740** in an item data management server to create a plurality of physical item data records corresponding to a plurality of physical items in the control of a user.

Beginning at step **742**, the item data management server presents a rapid entry generation query to the user terminal. The rapid entry generation query may be presented in a GUI with fields to receive a response from a user. At step **744**, the item data management server receives, in response to the rapid collection entry generation query, a default category corresponding to all of the plurality of physical items in the control of the user. At step **746**, the item data management server receives, in response to the rapid entry generation query, a set of default attributes corresponding to all of the plurality of physical items in the control of the user. In this manner, the creation of physical item data record population is automated with default category and attribute values, which a user may revisit to change, modify or otherwise update. And at step **750**, the item data management server **24** receives, in response to the rapid collection entry generation query, a plurality of data files. Each data file is respective to one of a plurality of physical items in the control of the user.

The item data management server creates the plurality of physical item data records, in which the item data management server alters each of the plurality of physical item data records to include the default category at step **754**, and alters each of the plurality of physical item data records to include the set of default attributes at step **756**. The item data management server associates each of the plurality of data files with a corresponding physical item data record at step **758**.

FIG. **24** is another signal flow diagram relating to creating a plurality of physical item data records with the item data management server **24** via a rapid item import GUI **230**. In general, the rapid item import GUI **230** facilitates rapid entry of physical items into the item data management server via a data file that includes a plurality of data components, where each of the data components are in the control of user.

The item data management server **24** presents a rapid entry generation query **762** to the user terminal **76**. The rapid entry generation query **762** includes data file queries **704**, **706**, **708**, and **710**. The data file queries **704** through **710** receive file location responses from a user, that may be directly entered into the fields for the data file queries, or may be located using a directory browse feature to access the directory structure of the user terminal **76** or a distributed device associated with the user terminal **76**. The filename and directory path are entered into the data file queries, and upon pressing the upload and create items command **234**, the item data management server **24** receives and creates physical item data records **240** (see FIG. **7**) for the physical items identified from the uploaded file and/or files.

Through the rapid entry generation query **702**, the rapid item import GUI **230** may receive locations for inventory files and/or media files, where each of the files contain multiple entries (such as an inventory file) or components (such as a media file) that may be parsed into individual physical item entries. The inventory files may have been created by other applications, but may be imported with file conversion utilities into the database **78**. That is, though pre-existing files may have file formats that differ from the database **78** (see FIG. **2**), the item data management server **24** may convert the file to a compatible format to create a plurality of physical item data records corresponding to a plurality of physical items in the control of a user with the underlying data. For

example, when receiving a plurality of inventory-based data files, the item data management server **24** uses a conversion utility to convert data from other file formats (such as Excel, TurboTax, Quickbooks, Quicken, et cetera) to populate a plurality of physical item data records of the database **78**.

The rapid entry generation query **702** may also accept media file locations for photo media files, digital recording files, text files, and/or multimedia files. For example, the data file query **704** includes a file location for a file that includes a plurality of data components respective to the plurality of physical items in the control of the user. In this example, the data file location is "c:/my files/saws.*," where the wildcard symbol "*" indicates that the file extension may be a various file formats, such as a photo media file format, a digital recording file format, a text file format, and/or a multimedia file format. Examples of the various file formats are discussed in detail with reference to FIGS. **25** through **27**.

In operation, when the item data management server **24** receives a data file with a plurality of data components, a parsing utility to automatically (or with user input) parses the data components from the file. In general, parsing serves to beak the data file **768** into smaller, more distinct components that can be more easily acted upon by the user. The parsing utility serves to reduce the time required by a user to enter their physical items into physical item data records. For example, entering all the hardware tools, jewelry, collection items, et cetera, in the control of user on an item-by-item basis may be a multi-day task, which the parsing utility can aid in reducing to a matter of hours.

The files that the item data management server **24** produces from the parsed data components can then be selected by the user for inclusion in the database **78** of the item data management server **24**. When the user does not select a parsed data component for inclusion in the item data management server **24**, the parsed data component may be deleted, or the parsed data component may be stored as a work-in-progress for later completion (including selection for inclusion in the database **78**) of the physical item data record. Further, the user may respond to a query to include the parsed data component in a pre-existing physical item data record.

When the user presses the upload and create items command **234**, in response to the rapid entry generation query **702**, the item data management server **24** receives a default category **764** and a set of default attributes **766**, each of which correspond to all of the plurality of physical items in the control of the user. The item data management server **24** also receives, in response to the rapid entry generation query **702**, at least one data file **768** that includes a plurality of data components respective to the plurality of physical items in the control of the user.

The item data management server **24**, at **770**, creates the plurality of physical item data records and alters each of the physical item data records to include the default category at **772**, and to include the set of default attributes at **774**. The item data management server **24**, at **776**, segregates the at least one data file into a plurality of data files, each of which includes a data component corresponding to a respective physical item in the control of the user. At **778**, the item data management server **24** associates each of the plurality of data files with a corresponding physical item data record.

FIG. **25** illustrates a photo media file **780** that includes a plurality of data components, which the item data management server **24** received in response to the rapid entry generation query **762**. In the example, the photo media file **780** has a JPEG file format as indicated by the file name "saws.jpg." The photo media file **780** includes a photo media data component **784** for a chainsaw, a photo media data component **786** for a hacksaw, and a photo media data component **788** for a hand saw.

The item data management server **24** segregates the photo media file **780** into a plurality of data files, which include photo media file **785**, photo media file **787**, and photo media file **789**. The server **24** segregates the photo media file **780** by parsing the components of the photo media file **780** into the plurality of photo media files **785** through **789**, each of which corresponds to a respective physical item in the control of the user.

FIG. **26** illustrates a digital multimedia file **790** that includes a plurality of data components, which the item data management server **24** received in response to the rapid entry generation query **762**. In the example, the digital multimedia file **790** has a Windows Media Video file format as indicated by the file name "saws.wmv." The digital multimedia file **790** includes a digital multimedia data component **794** for a chainsaw, a digital multimedia data component **796** for a hacksaw, and a digital multimedia data component **798** for a hand saw.

The item data management server **24** segregates the digital multimedia file **790** into a plurality of data files, which include digital multimedia file **795**, digital multimedia file **797**, and digital multimedia file **799**. The server **24** segregates the digital multimedia file **790** by parsing the file components into the plurality of digital multimedia files **795** through **799**, each of which corresponds to a respective physical item in the control of the user.

FIG. **27** illustrates a digital audio file **800** that includes a plurality of data components, which the item data management server **24** received in response to the rapid entry generation query **762**. In the example, the digital audio file **800** has a MPEG-3 file format as indicated by the file name "saws.mp3." The digital audio file **800** includes a digital audio component **804** for a chainsaw, a digital audio component **806** for a hacksaw, and a digital audio component **808** for a hand saw.

The item data management server **24** segregates the digital audio file **800** into a plurality of data files, which include digital audio file **805**, digital audio file **807**, and digital audio file **809**. The server **24** segregates the digital audio file **800** by parsing the components **804**, **806**, and **808** into the plurality of digital audio files **805** through **809**, each of which corresponds to a respective physical item in the control of the user.

FIG. **28** is a flow diagram illustrating a further method **820** in an item data management server to create a plurality of physical item data records corresponding to a plurality of physical items in the control of a user.

Beginning at step **822**, the item data management server **24** presents a rapid entry generation query to a user terminal. The server **24** receives, in response to the rapid entry generation query, a default category corresponding to all of the plurality of physical items in the control of the user at step **824**, a set of default attributes corresponding to all of the plurality of physical items in the control of the user at step **826**, and at least one data file that includes a plurality of data components respective to the plurality of physical items in the control of the user at step **828**.

At step **830**, the item data management server **24** creates a plurality of physical item data records, and alters each of the plurality of physical item data records to include the default category at step **832**, and to alter each of the plurality of physical item data records to include the set of default attributes at step **834**.

The item data management server **24**, at step **836**, segregates the at least one data file into a plurality of data files, each of which includes a data component corresponding to a

respective physical item in the control of the user. At step **838**, the item data management server **24** associates each of the plurality of data files with a corresponding physical item data record.

The present invention has been described above with the aid of functional building blocks illustrating the performance of certain significant functions. The boundaries of these functional building blocks have been arbitrarily defined for convenience of description. Alternate boundaries could be defined as long as the certain significant functions are appropriately performed. Similarly, flow diagram blocks may also have been arbitrarily defined herein to illustrate certain significant functionality. To the extent used, the flow diagram block boundaries and sequence could have been defined otherwise and still perform the certain significant functionality. Such alternate definitions of both functional building blocks and flow diagram blocks and sequences are thus within the scope and spirit of the claimed invention. One of average skill in the art will also recognize that the functional building blocks, and other illustrative blocks, modules and components herein, can be implemented as illustrated or by discrete components, application specific integrated circuits, processors executing appropriate software and the like or any combination thereof.

The present invention has also been described above with the aid of method steps illustrating the performance of specified functions and relationships thereof. The boundaries and sequence of these functional building blocks and method steps have been arbitrarily defined herein for convenience of description. Alternate boundaries and sequences can be defined so long as the specified functions and relationships are appropriately performed. Any such alternate boundaries or sequences are thus within the scope and spirit of the claimed invention.

What is claimed is:

1. A method for operating an item data management server to create a plurality of physical item data records corresponding to a plurality of physical items in the control of a user, the item data management server communicatively coupled to a user terminal via at least one data network, the method comprising:

presenting a rapid entry generation query to the user terminal, wherein the rapid entry generation query includes a filename field for identifying a plurality of data files upon which to create the plurality of physical item data records;

receiving, in response to the rapid entry generation query,

a default category corresponding to all of the plurality of physical items in the control of the user;

a set of default attributes and user created attributes corresponding to all of the plurality of physical items in the control of the user; and

the plurality of data files identified in the filename field upon which to create the plurality of physical item data records, each data file respective to one of the plurality of physical items in the control of the user;

creating the plurality of physical item data records based upon the response to the rapid entry generation query;

altering each of the plurality of physical item data records to include the default category;

altering each of the plurality of physical item data records to include the set of default attributes;

associating each of the plurality of data files with a corresponding physical item data record;

creating a web page that includes information from the physical item data record; and at least one other link selected based upon the physical item data record; and

presenting, via the item data management server, the web page to the user terminal.

2. The method of claim **1** wherein each data file is a photo media file.

3. The method of claim **1** each data file is a digital recording file.

4. The method of claim **1** each data file is a text file.

5. The method of claim **1** each data file is a multimedia file.

6. An item data management server to create a plurality of physical item data records corresponding to a plurality of physical items in the control of a user, the item data management server communicatively coupled to a user terminal via at least one data network, the item data management server comprises:

processing circuitry;

a network interface operably coupled to the processing circuitry that supports data transmission with the at least one data network;

a user interface operably coupled to the processing circuitry; and

memory operably coupled to the processing circuitry, wherein the memory stores operational instructions that cause the processing circuitry to:

present a rapid entry generation query to the user terminal, wherein the rapid entry generation query includes a filename field for identifying a plurality of data files upon which to create the plurality of physical item data records;

receive, in response to the rapid entry generation query,

a default category corresponding to all of the plurality of physical items in the control of the user;

a set of default attributes corresponding to all of the plurality of physical items in the control of the user; and

the plurality of data files identified in the filename field upon which to create the plurality of physical item data records, each data file respective to one of the plurality of physical items in the control of the user;

create the plurality of physical item data records based upon the response to the rapid entry generation query;

alter each of the plurality of physical item data records to include the default category;

alter each of the plurality of physical item data records to include the set of default attributes;

associate each of the plurality of data files with a corresponding physical item data record;

create a web page that includes information from the physical item data record; and at least one other link selected based upon the physical item data record; and

present, via the item data management server, the web page to the user terminal.

7. The item data management server of claim **6** wherein each data file is a photo media file.

8. The item data management server of claim **6** each data file is a digital recording file.

9. The item data management server of claim **6** each data file is a text file.

10. The item data management server of claim **6** each data file is a multimedia file.

11. A method for operating an item data management server to create a plurality of physical item data records corresponding to a plurality of physical items in the control of a user, the item data management server communicatively coupled to a user terminal via at least one data network, the method comprising:

presenting a rapid entry generation query to the user terminal, wherein the rapid entry generation query includes a filename field for identifying at least one data file upon which to create the plurality of physical item data records;

receiving, in response to the rapid entry generation query,

a default category corresponding to all of the plurality of physical items in the control of the user;

a set of default attributes corresponding to all of the plurality of physical items in the control of the user; and

at least one data file that includes a plurality of data components respective to the plurality of physical items in the control of the user;

creating the plurality of physical item data records based upon the response to the rapid entry generation query;

altering each of the plurality of physical item data records to include the default category;

altering each of the plurality of physical item data records to include the set of default attributes;

segregating the at least one data file into a plurality of data files, each of which includes a data component corresponding to a respective physical item in the control of the user;

associating each of the plurality of data files with a corresponding physical item data record;

creating a web page that includes information from the physical item data record; and at least one other link selected based upon the physical item data record; and

presenting, via the item data management server, the web page to the user terminal.

12. The method of claim **11**, wherein the at least one data file comprises a digital audio file, and

wherein segregating the at least one data file into the plurality of data files comprises parsing the digital audio file into a plurality of digital audio files, each of which corresponds to a respective physical item in the control of the user.

13. The method of claim **11**, wherein the at least one data file comprises a photo media file, and

wherein segregating the at least one data file into the plurality of data files comprises parsing the photo media file into a plurality of photo media files, each of which corresponds to a respective physical item in the control of the user.

14. The method of claim **11**, wherein the at least one data file comprises a digital multimedia file, and

wherein segregating the at least one data file into the plurality of data files comprises parsing the digital multimedia file into a plurality of digital multimedia files, each of which corresponds to a respective physical item in the control of the user.

15. An item data management server to create a plurality of physical item data records corresponding to a plurality of physical items in the control of a user, the item data management server communicatively coupled to a user terminal via at least one data network, the item data management server comprises:

processing circuitry;

a network interface operably coupled to the processing circuitry that supports data transmission with the at least one data network;

a user interface operably coupled to the processing circuitry; and

memory operably coupled to the processing circuitry, wherein the memory stores operational instructions that cause the processing circuitry to:

present a rapid entry generation query to the user terminal, wherein the rapid entry generation query includes a filename field for identifying at least one data file upon which to create the plurality of physical item data records;

receive, in response to the rapid entry generation query,

a default category corresponding to all of the plurality of physical items in the control of the user;

a set of default attributes corresponding to all of the plurality of physical items in the control of the user; and

at least one data file that includes a plurality of data components respective to the plurality of physical items in the control of the user;

create the plurality of physical item data records based upon the response to the rapid entry generation query;

alter each of the plurality of physical item data records to include the default category;

alter each of the plurality of physical item data records to include the set of default attributes;

segregate the at least one data file into a plurality of data files, each of which includes a data component corresponding to a respective physical item in the control of the user;

associate each of the plurality of data files with a corresponding physical item data record;

create a web page that includes information from the physical item data record; and at least one other link selected based upon the physical item data record; and

present, via the item data management server, the web page to the user terminal.

16. The item data management server of claim **15**, wherein the at least one data file comprises a digital audio file, and

wherein the memory further stores operational instructions that cause the processing circuitry to segregate the at least one data file into the plurality of data files by:

parsing the digital audio file into a plurality of digital audio files, each of which corresponds to a respective physical item in the control of the user.

17. The item data management server of claim **15**, wherein the at least one data file comprises a photo media file, and

wherein the memory further stores operational instructions that cause the processing circuitry to segregate the at least one data file into the plurality of data files by:

parsing the photo media file into a plurality of photo media files, each of which corresponds to a respective physical item in the control of the user.

18. The item data management server of claim **15**, wherein the at least one data file comprises a digital multimedia file, and

wherein the memory further stores operational instructions that cause the processing circuitry to segregate the at least one data file into the plurality of data files by:

parsing the digital multimedia file into a plurality of digital multimedia files, each of which corresponds to a respective physical item in the control of the user.

* * * * *